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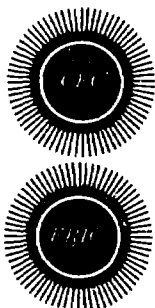
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 *Exceptional Child Education, Handicapped Children,
 Learning Disabilities, Motor Development, Perceptual
 Development, *Perceptual Motor Coordination,
 *Perceptual Motor Learning, Psychomotor Skills

ABSTRACT

One of a series of over 50 similar selected bibliographies dealing with handicapped and gifted children, the bibliography contains 96 references concerning perceptual-motor development and learning. Entries, which include research reports, texts, journal articles, and other types of literature, were selected from Exceptional Child Education Abstracts. Given are bibliographic data, availability information, indexing and retrieval terms, and abstracts for all entries. Also provided are author and subject indexes. (KW)

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PERCEPTUAL-MOTOR DEVELOPMENT

A Selective Bibliography

February 1971

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CEC Information Center on Exceptional Children
The Council for Exceptional Children
Jefferson Plaza, Suite 900
1411 S. Jefferson Davis Highway
Arlington, Virginia 22202

This bibliography is a product of the Information Processing
Unit, CEC-ERIC Information Center on Exceptional Children.

The work presented or reported herein was performed pursuant to a grant from the Bureau of
Education for the Handicapped, US Office of Education, Department of Health, Education, and
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401- 500	\$16.45	901-1,000	\$32.90

ABSTRACT 10018

EC 01 0018 ED 011 153
 Publ. Date 65 59p.
 Barsch, Ray H.

A Movigenic Curriculum.

Wisconsin Board Of Education, Madison, Pupil Services
 Wisconsin Dept. Of Public Instr., Madison, Bur. For Hand.
 Wisconsin Univ., Madison, Dept. Of Counseling And Behav.
 EDRS mf,hc

Descriptors: exceptional child education; learning disabilities; learning; curriculum; perceptual motor learning; learning difficulties; perceptual motor coordination; physical development; physical activities; experimental programs; underachievers; handicapped children; neurologically handicapped; physical fitness; learning activities; special programs

A physiological approach to the education of children with special learning difficulties was the basis of an experimental curriculum. The learner was seen as a space oriented being with a physiological makeup designed to travel through educational space, processing information to his progressive advantage. Eight constructs serve as a nucleus for a theory of movement, and special activities programed in each area are detailed. The movigenic curriculum is a supplement to the existing curriculum. Two groups of six elementary grade, normal ability children with learning problems spent 6 hours weekly for 1 school year in this program. Nine of these 11 were neurologically impaired. A third group of six preschoolers met for one half year. A third group of six was not attempted but was planned as a later, second stage. (HJ)

ABSTRACT 10127

EC 01 0127 ED 016 342
 Publ. Date 67
 Ismail, A. H.; Gruber, J. J.
Integrated Development, Motor Aptitude and Intellectual Performance.
 EDRS not available

Descriptors: exceptional child research; physical education; perception; child development; achievement; academic achievement; intellectual development; psychomotor skills; physical fitness; sex differences; intelligence differences; intelligence; physical development; learning; perceptual motor coordination

The relationship of movement responses to learning achievement was investigated (1) to identify factors claimed to measure motor aptitude and intellectual achievement in pre-adolescents, (2) to develop motor aptitude test batteries for predicting intellectual achievement, (3) to study relationships of coordination and balance test items in predicting intellectual achievement, (4) to study sex differences in motor aptitude test items, and (5) to validate these findings

through studying effects of an organized physical education program on intellectual performance. A battery of motor aptitude test items useful in predicting academic success was selected by factor analyses. Other tests used included the Otis Short Form Test of Mental Ability and the Stanford Standard Achievement Tests. Boys (122) and girls (89) were used as subjects. Three subgroups were established for each sex--(1) high achievers (IQ scores 125 and above), (2) medium achievers (IQ scores 95-100), and (3) low achievers (IQ scores 85 and below). Results indicate that coordination and balance items tested have a high degree of discrimination power among medium achievers. Intercorrelations pertaining to levels of intellectual performance indicate coordination and growth items are related to academic achievement. Factor analysis of the 42 items revealed a uniformity of factor structure pertaining to sex, but that these structures lose their uniformity in the three achievement groups. It was concluded that there was a demonstrated relationship between intellectual achievement and certain physical performance items. The relationship was great enough to permit prediction. Thus an organized physical education program was developed to study further its relative effectiveness on IQ and academic achievement scores. The activities included calisthenics, gymnastics, track and field events, games, and rhythmic. The organized program was found to have no effect on IQ scores but did have a favorable effect on academic achievement scores. A 67-item bibliography is included. This document is available from Charles E. Merrill Books, Inc., Columbus, Ohio 42216, for \$4.95. (DF)

ABSTRACT 10176

EC 01 0176 ED 018 017
 Publ. Date 66
 Ashlock, Patrick; Stephen, Alberta
Educational Therapy in the Elementary School, an Educational Approach to the Learning Problems of Children.
 EDRS not available

Descriptors: exceptional child education; educational needs; teaching methods; learning disabilities; educational therapy; perceptually handicapped; physically handicapped; language handicapped; academic achievement; personality assessment; intelligence; perceptual motor coordination; behavior change; sensory training; perceptual development; skill development; remedial instruction; program evaluation; educational diagnosis; diagnostic tests; instructional materials

Written chiefly for classroom and special teachers, school supervisors, and psychologists, this handbook presents the principles, methods, and goals of educational therapy. After the questions of what educational therapy is and who

needs such therapy are considered, the steps to take in describing learning problems encountered in children are outlined. Diagnostic procedures are suggested for physical problems, perceptual problems, language problems, intellectual functioning, personality development, and academic achievement. A variety of procedures is described for improvement in general physical ability and coordination, sensory and perceptual processes, learning patterns, and emotional and behavioral control. Transfer into remedial instruction in the skill subjects and transition into the subject areas are discussed. Evaluation of educational therapy is also treated. The bibliography includes 154 references. Appendixes contain recommended materials and a list of publishers addresses. This document is available from Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703, for \$6.75. (DF)

ABSTRACT 10179

EC 01 0179 ED 018 019
 Publ. Date 66 47p.
 Perry, Harold W.
A Perceptual Training Program for Children with Learning Disorders.
 Memphis City Sch. System, Tennessee
 EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; teaching methods; program evaluation; tests; special classes; perception; perceptually handicapped; minimally brain injured

An experimental training program studied the effectiveness of new methods of identifying and teaching perceptually handicapped children with learning disorders. Subjects were selected by the following criteria--specific learning deficits, perceptual deficits, general coordination deficits, hyperkinesis, impulsivity, emotional lability, short attention span and/or distractibility, and equivocal neurological signs. Subjects selected were placed either in class type T (tractable or tranquil) or in type H (hyperkinetic). Experimental controls exercised included evaluation of all children before enrollment in special classes, unbiased selection, and assignment of some of the suitable children to regular classes. A 3-year evaluation was made. Curriculum focused on basic school skills, and teachers took account of the characteristic variability of perceptually handicapped children. Classrooms were adapted to eliminate distraction, and classes were kept small. Motor activity and repetition were structured into classroom activities. Special training was required of the teachers. The first year the 14 experimental subjects improved over the 10 controls with an average grade level difference of .13 in reading, 1.01 in spelling, and .92 in arithmetic. The second year the 31 subjects improved an average of 1.3 in

reading, .9 in spelling, and .9 in arithmetic. Behavioral changes were also noted. The Bender-Gestalt tests were administered to measure perceptual growth. During the third year, with 94 subjects in 11 classes, average improvement was .8 in reading, .6 in spelling, and .6 in arithmetic. Tables of achievement scores are given. The sources of the teaching methods used are identified as Alfred Strauss and Laura Lehtinen, and the Frosig Program for Development of Visual Perception and the Hay-Wingo method of teaching reading and language skill are recommended. Drawings evidencing visual and visual motor perceptual growth of several children involved in the program are included as exhibits. A bibliography lists four items. (JD)

ABSTRACT 10220

EC 01 0220 ED 018 901

Publ. Date 67

Barsch, Ray H.

Achieving Perceptual-Motor Efficiency, a Space-Oriented Approach to Learning. Perceptual Motor Curriculum, Volume 1.

EDRS not available

Descriptors: exceptional child education; learning disabilities; curriculum; perception; neurologically handicapped; children; learning theories; psychomotor skills; perceptually handicapped; perceptual motor learning; perceptual development; perceptual motor coordination; auditory perception; visual perception; haptic perception; tactual perception; sensory experience; space orientation; movigenics

The first of a 3-volume perceptual motor curriculum, the book describes a program based on a theory of movement which the author labels movigenics (the study of the origin and development of patterns of movement in man and the relationship of these movements to his learning efficiency). Ten basic constructs of movigenics are outlined, and the following topics are discussed--(1) the concept of space, (2) muscular strength, (3) dynamic balance, (4) body awareness, (5) spatial awareness, and (6) temporal awareness. The contributions of sensory modes (gustatory, olfactory, tactual, kinesthetic, auditory, visual) and the percepto-cognitive modes are explored. Also, bilaterality, rhythm, flexibility, and motor planning are considered as four components which permit man the full freedom to move. A curriculum based on the theory of movigenics and leading to movement efficiency in both physical and cognitive spheres is defined in terms of 10 guidelines. The bibliography contains about 420 entries. This document was published by Special Child Publications, Seattle Seguin School, Inc., 71 Columbus Street, Seattle, Washington 98104, for \$10.00. (DF)

ABSTRACT 10222

EC 01 0222 ED 018 037

Publ. Date Aug 67

Cratty, Bryant J.

Movement Behavior and Motor Learning. Second Edition. EDRS not available

Descriptors: exceptional child research; learning; child development; perception; behavior; perceptual motor learning; perceptual motor coordination; performance; skill development; vocabulary; space orientation; learning theories; visual perception; instruction; maturation; motivation; social influences; anxiety; performance factors; communication (thought transfer); ability; performance tests; transfer of training; retention; literature reviews; visual perception; neurology

To bring together data relevant to the understanding of human movement with particular reference to learning, the text surveys the concern of several disciplines with motor behavior and learning. Words and definitions are established, and the evolution of the human action system is discussed. A consideration of perception treats the process of perception, instructions and input, perceptions of the self and near space, and visual-space perception. Maturation, motivation, social motives, and anxiety, stress, and tension are included in a discussion of the performer (learner). Movement behavior and ability traits are analyzed in terms of neurological foundations of voluntary movement, personal equations in movement, communication through movement, and ability traits. The treatment of learning reviews neurological and biochemical bases of learning and retention, perceptual motor learning based upon performance measures, practice factors in learning and retention, transfer, and an overview. A bibliography cites 1,000 references. This document is available from Lea/Febiger, 600 South Washington Square, Philadelphia, Pennsylvania 19106, for \$7.50. (DF)

ABSTRACT 10261

EC 01 0261 ED N.A.

Publ. Date Oct 67

19p.

Rubin, Eli Z.; Braun, Jean S.

Behavioral and Learning Disabilities Associated with Cognitive-Motor Dysfunction. Interim Report.

Lafayette Clinic, Detroit, Michigan

OEG-32-32-7545-5017

EDRS mf,hc

Descriptors: exceptional child research; perception; emotionally disturbed; behavior; cognitive processes; cognitive tests; cognitive development; perceptual motor coordination; perceptual motor learning; psychomotor skills; basic skills; grade 1; grade 2; grade 3; grade 5; elementary grades; primary grades; testing; maladjustment; environmental influences; emotional problems

The relationship of behavioral and academic disabilities to cognitive motor dysfunction was studied in 373 children selected from grades 1, 2, 3, and 5 by a behavior checklist completed by teachers. A matched control group showed no behavior symptoms. Factor analysis of the checklist items revealed behavior

indicators of poor coordination and perceptual awareness as well as antisocial and withdrawn symptoms. This disorientation factor was the first general factor among children in grade 1 and appeared with high loadings in the other grades. To test the hypothesis that maladjustment in early school years could be a secondary result of inability to meet cognitive motor demands, a battery of tests along nine dimensions (such as perception, integration, and motor control) was given to 198 maladjusted and 200 problem-free children. Control children generally obtained less than five error scores, denoting minimal cognitive perceptual motor difficulty. Scores for the experimental group were bimodal, indicating (1) a subgroup, with low dysfunction, showing primary emotional difficulties from adverse environmental influences and (2) a subgroup, with high dysfunction, showing behavior maladjustment secondary to problems in coping with environmental cognitive perceptual motor demands. Subgroups (1) indicated an association between cognitive motor dysfunction and academic difficulties and (2) differed significantly on the total score for behavioral maladjustment and on the sum of four items relating to disoriented behavior. Recommendations are made for identification and planning. Eight tables and figures present data. A bibliography lists 12 items. (DF)

ABSTRACT 10299

EC 01 0299 ED 017 105

Publ. Date 67

Van Witsen, Betty

Perceptual Training Activities Handbook. Teachers College Series in Special Education.

Columbia Univ., New York, New York, Teachers College

EDRS not available

Descriptors: exceptional child education; learning disabilities; perception; perceptually handicapped; perceptual development; visual perception; auditory perception; tactual perception; haptic perception; learning activities; teaching guides

Intended for teachers and supervisors working with children who have learning disabilities, especially those related to perceptual disturbances, this document describes behavior which results from a lack of meaningful organization of perception and suggests management techniques. Activities are presented under these headings--visual training, auditory perception skills, tactile perception skills, olfactory perception skills, gustatory perception skills, and kinesthetic perception activities. Fifty-three references are listed. An appendix on paper folding describes basic folds. This document was published by Teachers College Press, Teachers College, Columbia University, New York, New York 10027, and is available for \$1.75. (JA)

ABSTRACT 10375

EC 01 0375 ED 019 769

Publ. Date 63

Proceedings of the Conference on Exploration into the Problems of the Perceptually Handicapped Child (1st Annual, Chicago, Illinois, April 6, 1963). Volume 1.

Fund For Perceptually Handicapped Children, Evanston, Ill.
EDRS not available

Descriptors: exceptional child education; learning disabilities; behavior; learning; educational needs; minimally brain injured; remedial instruction; educationally disadvantaged; perceptually handicapped; perceptual motor learning; conference reports; language development; cognitive processes; educational diagnosis; parent associations; language tests; taxonomy; organizations (groups); psychological characteristics; family (sociological unit); community attitudes; community services; teaching methods; socialization; environmental influences

The proceedings of a 1963 conference of the Fund for Perceptually Handicapped Children, Inc., are presented. Addresses given include Behavioral Diagnosis and Remediation of Learning Disabilities by Samuel A. Kirk, Perceptual-Motor Problems of Children by Newell C. Kephart, Two Plus Two Equals Five by Mamie Jo Jones, Emphases for the Future by Laura Lehtinen, and What Do We Mean by Learning Disorders by Helmer Myklebust. Seminars on education, psychology, social functioning and the community, and the family are previewed and reported. Also included are reports by representatives of 14 lay associations on perceptually handicapped children. A summation by Walter Goodman, Forming a National Organization, is provided. The conference management, the seminar participants and speakers, the conference program, and the persons attending the conference are listed. This document is available from the Fund for Perceptually Handicapped Children, Inc., Box 656, Evanston, Illinois 60204, for \$5.00. (JD)

ABSTRACT 10463

EC 01 0463 ED 015 583
Publ. Date 20 Oct 66 39p.
Bibliography on Research in Psychomotor Function, Physical Education, and Recreation for the Mentally Retarded.
Association Health, Phys. Educ., And Recreation, Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child research; physical education; recreation; mentally handicapped; psychomotor skills; children's games; custodial mentally handicapped; educable mentally handicapped; games; minimally brain injured; neurologically handicapped; physical fitness; physical recreation programs; recreational activities; recreational facilities; recreational programs; research; trainable mentally handicapped

Ranging in date from 1900 to 1966, this alphabetized bibliography lists 490 articles, reports, unpublished works, and papers concerning recreation, physical education, and psychomotor functions.

The bibliography's citations are relevant to the educable, trainable, severely, and profoundly mentally handicapped, the brain damaged, and those with neuro-pathological conditions. (JA)

ABSTRACT 10517

EC 01 0517 ED 023 213
Publ. Date Sep 66 41p.
Kershner, John R.; Bauer, David H.
Neuropsychological and Perceptual-Motor Theories of Treatment for Children with Educational Inadequacies.
Pennsylvania State Department Of Public Instruction, Harrisburg, Bureau Of Research
EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; perception; learning; child development; learning theories; adaptation level theory; models; neurological organization; etiology; mentally handicapped; psychoeducational processes; perceptual motor learning; perceptual development; space orientation; Glenn Doman; Carl H. Delacato; Newell C. Kephart

Two divergent approaches to the treatment of children with nonprogressive brain injury (the medical or neuropsychological and the educational or perceptual-motor) are discussed and compared by treatment rationale, models of the perceptual process, etiology, and organization theory. A guide to a comprehensive theory of development, based on stimulation of the central nervous system, is presented; and, by placing the two theories in perspective, a treatment rationale is derived from the similarities of their methods. The design of a theoretical model based on the latest neurological findings is suggested. Recommendations for research, a pilot study on the neuropsychological method, a developmental profile chart, and a 33-item bibliography are included. (DF)

ABSTRACT 10533

EC 01 0533 ED N.A.
Publ. Date 68 138p.
Chaney, Clara M.; Kephart, Newell C.
Motoric Aids to Perceptual Training. The Slow Learner Series.
EDRS not available
Charles E. Merrill Publishing Company, 1300 Alum Creek Drive, Columbus, Ohio 43216 (\$3.95).

Descriptors: exceptional child education; teaching methods; learning disabilities; perception; learning; educational games; perceptual motor coordination; neurologically handicapped; motor development; mentally handicapped; stimulus generalization; behavior change; self concept; psychomotor skills; auditory training; speech skills; visual learning; discrimination learning; minimally brain injured

Written from a developmental viewpoint, this book for parents and teachers presents both a theoretical orientation and perceptual motor activities for training children with learning disabilities, both the brain injured and the retarded. The theoretical basis for training gener-

alized motor responses is considered in terms of motor perceptual learning, the motor system and generalization, exploration through movement, cognition, developmental sequences, and structure and control of behavior. Procedures for evaluating behavior are detailed by an 85-item checklist of basic motor movements, a 38-item checklist of visual motor movements, and 23 guidelines for self help and motor development. Descriptions of training activities and programs include these areas: learning to listen, with six recommended phonograph records and 11 stories; balance and posture, with balance beam activities, and development of body image and awareness; arm and leg differentiation, and locomotion with swimming pool and trampoline activities; ocular motor coordination; and oral motor manipulation with developmental games. (MK)

ABSTRACT 10534

EC 01 0534 ED 022 310
Publ. Date May 68 196p.
Ebersole, Marylou; And Others
Steps to Achievement for the Slow Learner. The Slow Learner Series.
EDRS not available
Charles E. Merrill Publishing Company, 1300 Alum Creek Drive, Columbus, Ohio 43216 (\$4.95).

Descriptors: exceptional child education; learning disabilities; teaching methods; preschool children; minimally brain injured; motor development; perceptual motor coordination; learning theories; psychomotor skills; student characteristics; student needs; neurological organization; space orientation; concept formation; reading; writing; arithmetic

Intended for teachers, therapists, physicians, students, and parents, the guide presents a learning theory based on motor activities and suggests a curriculum for preschoolers divided into systematic learning steps which are necessary for attaining educational goals. Topics treated are special needs of the child handicapped by brain damage, characteristics and discipline, brain damage related to the function of the nervous system, learning theory related to teaching techniques, the need for a stable point of reference from which to interpret relations in space, and the developmental stages of learning. Also considered and detailed by steps are conceptualization, arm and hand coordination, cutting with scissors, pre-reading, pre-writing, and pre-arithmetic (counting and number concepts). Three appendixes contain activities for teaching colors and pattern analysis and development with form boards, and steps in teaching pre-arithmetic. (DF)

ABSTRACT 10544

EC 01 0544 ED 023 242
Publ. Date Nov 67 53p.
Ross, Sheila A.
A Study of the Effects of an Intensive Training Program on the Motor Skills of Young Educable Mentally Retarded Children.

Palo Alto Medical Research Foundation, California
Office Of Education (DHEW), Washington, D.C., Bureau Of Research
EDRS mf,hc
OEG-4-7-070025-1944
BR-7-0025

Descriptors: exceptional child research; mentally handicapped; recreation; physical education; perceptual motor coordination; childrens games; educable mentally handicapped; physical recreation programs; test results; test reliability; motor development; skill development; average students

In a study on improvement of basic motor skills by educable mentally retarded (EMR) children with special training in a sport and game situation, 21 EMR boys and 19 EMR girls (aged 4-1 to 10-1) were divided into an experimental and a control group, matched by chronological age, IQ, sex, and pretest scores on the Basic Skills Test (reliability .97) and the Brace Test Items (eight items were used on this test of general motor skills). An average group (nine boys and 11 girls, 4-10 to 9-7, IQ range 90 to 110) also served as a control. The experimental group received 20- to 25-minute training three times a week for 6 months on these skills: hitting, catching, throwing, running, jumping, bouncing, kicking, hopping, skipping, balancing, and target-throwing. The two control groups remained in the regular physical education programs for EMR and average children. On the two tests, the EMR groups did not differ significantly on pretest scores, but both differed significantly (p equals .001) from the average control group. Upon posttesting, the two EMR groups did not differ on the Brace Test; the EMR experimental group differed significantly (p less than .001) from the control group on the Basic Skills Tests; and the average group did not differ significantly from the experimental group. (Author/SN)

ABSTRACT 10573

EC 01 0573 ED 021 357
Publ. Date Aug 67 67p.
Best, Helen And Others
The Effect of Structured Physical Activity on the Motor Skill Development of Children with Learning Disabilities (Minimal Brain Dysfunction). Memphis State University, Tennessee
EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; physical education; minimally brain injured; physical activities; motor development; skill development; tests; psychomotor skills; perceptual motor coordination; perceptual motor learning; children; special programs; Johnson Test of Motor Skill Development

Students in 24 perceptual development classes for the minimally brain injured were studied to determine the effect of structured physical activity on motor skill development, to compare this effect with the effect of unstructured activity, and to determine the effect of an in-

creased amount of time of physical activity. The Johnson Test of Motor Skill Development was administered before and after an 8-week program. The experimental group of classes was given structured physical activities; the control group had regular play periods. Results indicated a statistically significant difference between the experimental and control groups (p less than .01) with increased motor skill development occurring in the experimental group. Schedules and diaries recording structured activities used in the experimental group are included. The Johnson Test, four tables, four illustrations, and a 19-item bibliography are provided. (LE)

ABSTRACT 10588

EC 01 0588 ED 023 219
41p.

Alpha Chi Omega Toy Book.

Alpha Chi Omega Fraternity, Indianapolis, Indiana
EDRS mf,hc
Alpha Chi Omega National Headquarters, 3445 Washington Boulevard, Indianapolis, Indiana 46205.

Descriptors: exceptional child education; physically handicapped; self care skills; instructional materials; manipulative materials; cerebral palsy; children; toys; psychomotor skills; perceptual motor coordination; skill development; games; handicapped

Patterns and directions are given for making self-help toys for cerebral palsied and other handicapped children. The toys are designed to entertain and to develop muscle coordination and finger-elbow dexterity, teach self-help skills such as dressing, stimulate visual perception, encourage hand grasps and eye-hand coordination, motivate speech, and give dramatic play. Illustrations and directions are given for the construction of 38 toys; 10 additional toys and 11 kits for play activities are also suggested. (DF)

ABSTRACT 10640

EC 01 0640 ED 024 203
Publ. Date Jun 68 241p.

Rubin, Eli Z. And Others

An Investigation of an Evaluation Method and Retraining Procedures for Emotionally Handicapped Children with Cognitive-Motor Deficits. Interim Report. Part 1, Testing for Cognitive-Perceptual-Motor Dysfunction.

Lafayette Clinic, Detroit, Michigan
Office Of Education (DHEW), Washington, D.C., Bureau Of Research
EDRS mf,hc
OEG-32-32-7545-5017
BR-7-0319; BR-5-0404

Descriptors: exceptional child research; emotionally disturbed; learning disabilities; identification; perceptual motor coordination; psychomotor skills; nonverbal learning; elementary grades; visual perception; behavior; adjustment problems; eye hand coordination; maladjustment; intelligence; linguistics; performance factors; task performance; screening tests; perceptually handicapped

Using a 41-test battery of cognitive-perceptual-motor tests supplemented by standardized tests of intelligence, visual perception, eye hand coordination, linguistics, and non-verbal integration, a group of 200 maladjusted school age children from grades 1, 2, 3, and 5 was compared with a group of problem-free children similar in size, sex distribution, and other relevant characteristics. The findings supported the hypothesis that a significant percentage of maladjusted school children have serious immaturities in cognitive-perceptual-motor functioning which are associated with their behavior maladjustment and learning disorder. Two clearly distinguishable groups were found within each maladjusted grade group: a low dysfunction group of 60% who functioned well and similar to the problem-free children on cognitive motor tasks; and a high dysfunction group of 40% who were extremely low in their performance. This high dysfunction group was considered highly vulnerable to problem behavior and learning disorder, needing maximum attention at school. A major product of the research, a complete test procedure, which was refined for economical use as a screening instrument in schools, clinics, and day care centers, and which provides information useful in remedial and retraining programs, is included. The final report is also in the ERIC system. (Author)

ABSTRACT 10641

EC 01 0641 ED 024 204
Publ. Date Jun 68 159p.

Rubin, Eli Z. And Others

An Investigation of an Evaluation Method and Retraining Procedures for Emotionally Handicapped Children with Cognitive-Motor Deficits. Final Report.

Lafayette Clinic, Detroit, Michigan
Office Of Education (DHEW), Washington, D.C., Bureau Of Research
EDRS mf,hc
OEG-32-32-7545-5017
BR-7-0319; BR-5-0404

Descriptors: exceptional child research; emotionally disturbed; achievement; behavior; learning disabilities; perceptually handicapped; psychomotor skills; perceptual motor coordination; cognitive development; tests; academic achievement; remedial instruction; training; primary grades; profile evaluation; average students; maladjustment; adjustment problems

To assess the effects of specialized retraining of cognitive, perceptual, and motor (CPM) deficits, a battery of tests was prepared and used with 200 behaviorally maladjusted and 200 problem-free children. The composite score indicated that 40% of the maladjusted group manifested major dysfunction whereas none of the problem-free group demonstrated such deficits. Fifty-eight of the maladjusted subjects (from grades 1, 2, and 3) with high dysfunction and academic retardation were selected and assigned to three groups. Thirty received CPM training based on their profiles; 14

were given remedial work based on a survey of their academic skills and IQ results; 14 served as controls. Measures of academic achievement and behavioral adjustment were devised and a test-retest design was used. The results indicated that CPM training was most applicable to children who had developed few, if any, academic skills, appropriate for children at the first grade or below. Programs combining training and remedial instruction were seen to be required for children of second grade or above. Testing and training materials are appended. The interim report is also in the ERIC system. (Author/JD)

ABSTRACT 10649

EC 01 0649 ED 023 228
Publ. Date 68 116p.

Benyon, Sheila Doran

Intensive Programming for Slow Learners. The Slow Learner Series.

EDRS not available

Charles E. Merrill Books, Inc., 1300 Alura Creek Drive, Columbus, Ohio 43216 (\$1.75, Paperback; \$3.95, Cloth).

Descriptors: exceptional child research; learning disabilities; teaching methods; perception; perceptual motor learning; perceptual motor coordination; case studies (education); test results; perception tests; projective tests; perceptually handicapped; sensory integration; motor development; coordination; self actualization; self concept; space orientation; sensory aids; discrimination learning

Seven children with basic perceptual motor problems (learning disorders) in varying severity were selected for a 6-week intensive program. All were from 6 to 8 years old and had mental ages 2 years below their chronological age. Structured and integrated areas of instruction were speech and language, perceptual-motor, gross motor, and aquatics. Main areas of emphasis were body image, position in space, form constancy, and sensory integration. Instructional materials included teacher-made and commercial supplies, gymnastic equipment, and a pool. Two parent conferences took place, and daily records were kept on the children's progress. Case studies on each child present background information, contact with center, initial status, behavioral characteristics, speech and language skills, perceptual and motor problems, and aquatic accomplishments. The 27 daily lesson plans describe the materials and teaching methods used. Six pre- and posttests include the Metropolitan Readiness Test and the Goodenough Draw-a-Man Test. On the former test, four children improved from E (Low) to D (Low Normal), one from D to a higher D, one from C (Average) to B (High Normal), and one from A (Superior) to a higher A. On the latter tests, increases in mental age ranged from 6 months to 4 years. (SN)

ABSTRACT 10663

EC 01 0663 ED N.A.
Publ. Date 66 264p.
Crawford, John E.

Children with Subtle Perceptual-Motor Difficulties.

EDRS not available

Stanwix House, 3020 Chartiers Avenue, Pittsburgh, Pennsylvania 15204.

Descriptors: exceptional child education; learning disabilities; identification; behavior; children; perceptual motor coordination; minimally brain injured; perceptually handicapped; pathology; clinical diagnosis; diseases; neurological defects; teacher role; physicians; parent counseling; medical treatment; neurology; individual characteristics; emotional problems; physiology; etiology; biochemistry; medical evaluation; check lists

In order to help teachers and others recognize perceptual-motor-expressive difficulties early enough to help children through appropriate remedial techniques, the text describes several children who illustrate the broad syndrome and differentiates among these children in clinical characteristics, organic signs, and behavior. Also considered are advances in diagnosis, the role of the teacher, identifying signals which the teacher can discern, emotional complications, and the effects of misunderstanding. Endocrine dysfunctions and brain and central nervous system dysfunctions are discussed, along with the role of the neurologist in diagnosis, clinical facets of the children, pharmacotherapy aids, parent therapy, early recognition, and possible breakthroughs. Thirty-eight illustrations, a list of 37 books recommended for teachers, and a glossary of 92 items are provided. (DF)

ABSTRACT 10760

EC 01 0760 ED 023 201
Publ. Date 67 95p.

Cratty, Bryant J.

Developmental Sequences of Perceptual-Motor Tasks, Movement Activities for Neurologically Handicapped and Retarded Children and Youth.

EDRS not available

Educational Activities, Inc., P. O. Box 392, Freeport, New York 11520 (\$2.95).

Descriptors: exceptional child education; mentally handicapped; learning disabilities; physical education; teaching methods; educable mentally handicapped; trainable mentally handicapped; mongolism; children; neurologically handicapped; adolescents; physical fitness; physical activities; games; sequential learning; curriculum guides; development; perceptual motor coordination

Intended for special education and physical education teachers, the handbook presents selected developmental sequences of activities based on the analysis of perceptual motor characteristics of groups of retarded and neurologically handicapped children. Four classifications of children and their perceptual motor characteristics are discussed: the trainable retarded, the educable retarded, mongoloids, and the neurologically handicapped. Teaching guidelines are given for presentation of motor activities, and specific programs are outlined for evaluation and graded development.

Areas covered are body image (perceptions of the body and its position in space), balance, locomotion, agility, strength and endurance plus flexibility (fitness), catching and throwing balls, manual abilities, and moving and thinking. The importance of the initial evaluation of children in program planning is reviewed, and model programs for the four classifications of children are outlined. A glossary and a 123-item bibliography, which includes sources of games and similar activities, are provided. (SB)

ABSTRACT 10761

EC 01 0761 ED 024 163
Publ. Date Apr 67 113p.

Sapir, Selma G.

A Pilot Approach to the Education of First Grade Public School Children with Problems in Bodily Schema, Perceptual-Motor and or Language Development. Final Report.

Columbia University, New York, New York, Teachers College;

Union Free School District Number 1, Scarsdale, New York

Office Of Education (DHEW), Washington, D. C., Bureau Of Research

EDRS mf,hc

OEG-32-42-0280-6905

BR-6-8275

Descriptors: exceptional child research; learning disabilities; perception; language; teaching methods; grade 1; visual perception; language development; academic achievement; auditory perception; discrimination learning; perceptual motor learning; expressive language; experimental programs; perceptual development; screening tests; sensory integration; experimental teaching

Fifty-four kindergarten children were screened with the Sapir Developmental Scale to highlight deficiencies in bodily schema, perceptual motor skills, and language development, and were matched in groups of three by score, chronological age, and sex with one of the three acting as control. Three first grade classes were organized as follows: one experimental with 12 deficit children using a deficit centered training curriculum; one experimental with 24 normal children using a traditional curriculum; one control with six deficit children and 12 normal children using a traditional curriculum. The children were given a battery of psychodiagnostic tests in the fall and spring of the first grade. The results clearly favored the deficit children in the experimental class with significant differences in mean change in Wechsler Intelligence Scale for Children scores (p equals .05), visual perception and language functioning (p equals .01), and in perceptual motor skills (p less than .05). Important changes were also noted for the same groups in auditory-visual integration and visual perception, and in language development, particularly in expressive areas. Little difference was seen in the measurement of academic achievement. Performance favored the normal experimental group but without significant differences. (Author/SN)

ABSTRACT 10938

EC 01 0938 ED 026 782
 Publ. Date 68 124p.

Getman, G. N. And Others
Developing Learning Readiness; A Visual-Motor-Tactile Skills Program. Teacher's Manual.
 EDRS not available
 McGraw-Hill Book Company, Webster Division, Manchester Road, Manchester, Missouri 63011.

Descriptors: exceptional child education; teaching methods; perceptual motor coordination; perception; eye hand coordination; eye movements; kinesthetic perception; visual discrimination; sensory training; visualization; memory; physical activities; motor development; learning readiness; space orientation; tactual perception; preschool children; elementary school students

A flexible program for preschool, primary grades, or remedial classes provides opportunities for the child to achieve readiness for learning through the development of visual, motor, and tactile skills. A cardboard doll is discussed which may be utilized by the teacher and children in a variety of gymnasium routines to increase knowledge of body movements. Activities are described to enhance balance using the walking beam; also described are routines for practice in eye hand coordination and eye movement. Instructions are given for exercises to improve form perception and visual memory. Space, material, and equipment needs are specified. (LE)

ABSTRACT 10996

EC 01 0996 ED N.A.
 Publ. Date 66 95p.

MacDonald, Robert L.
They Were Not Born Equal.
 San Fernando Valley State College, Northridge, California, Department Of Special Education
 EDRS not available
 Remediation Associates, Inc., Van Nuys, California

Descriptors: exceptional child education; learning disabilities; disadvantaged youth; perception; teaching methods; motor development; identification; perceptual motor coordination; sensory training; auditory perception; visual perception; auditory training; eye hand coordination; phonetics; memory; verbal ability; auditory discrimination; evaluation techniques; concept formation

Focusing on children who have not had the physical or mental experiences necessary for developing maximum potential, the nature of experience is described in terms of the total child, the unequal child, the meaning of movement, and the assessment and training of physical fitness. A discussion of sensory learning mentions problems in communication, auditory and visual learning, the assessment of auditory and visual abilities, and sensory training procedures. Considerations of visual motor coordination are the direction of motion by vision, ocular control, visual percep-

tion, and assessment and training procedures for eye-hand coordination and ocular responses. The progression of learning, the importance of phonics, the relation of perceptual skills to the advancing demands on the student, and perceptual training assessment are investigated in relation to academic performance. The development of conceptual skills includes development of thought, conceptual thought and language, memory and imagination, and the assessment and training of psycholinguistic skills. Pictorial examples of instructional materials and lists of words or sentences to be used in remediation are provided. (RP)

ABSTRACT 11004

EC 01 1004 ED N.A.
 Publ. Date 66 15p.

Anderson, Robert P.
Physiologic Considerations in Learning: The Tactual Mode.
 Texas Technological College, Lubbock, Department Of Psychology
 EDRS not available
 Special Child Publications, Seattle Seguin School, Inc., 71 Columbia Street, Seattle, Washington 98104.
 Chapter In Learning Disorders, Volume 2, Pages 97-112.

Descriptors: exceptional child education; learning disabilities; perception; reading; teaching methods; tactual perception; haptic perception; cutaneous sense; kinesthetic perception; sensory integration; perceptual development; perceptual motor learning; kinesthetic methods; reading instruction; tachistoscopes

Touch is considered as a medium of communication by which a child perceives properties of his environment. Psychological theories and research on touch perception are reviewed and the concept of haptic perception, involving a perceptual pattern which has as its sensory source both touch and kinesthesia, is introduced. Psychological procedures for assessing tactual and/or haptic perception are discussed, and training in the tactual mode using skin perception, tactile perception and stereovision is described. Tactual kinesthetic techniques which can be used to supplement auditory and visual techniques for teaching reading are listed: tracing words and letters, clay tray and sandbox writing, air writing, block letters, blackout cards, tachistoscope methods, phonics, and other visual and auditory aids. Two practical techniques involving the haptic approach for reading and one for arithmetic are described. Research needs relating touch to learning disorders are enumerated, and a 37-item reference list is included. (TE)

ABSTRACT 11006

EC 01 1006 ED N.A.
 Publ. Date 66 31p.

McAinch, Myrene
Body Image as Related to Perceptual-Cognitive Motor Disabilities.
 Washington University, Seattle, College Of Education
 EDRS not available

Special Child Publications, Seattle Seguin School, Inc., 71 Columbia Street, Seattle, Washington 98104.
 Chapter In Learning Disorders, Volume 2, Pages 139-70.

Descriptors: exceptional child education; perception; neurologically handicapped; self concept; tests; handicapped children; perceptual motor learning; perceptual motor coordination; perception tests; test evaluation; self actualization; self esteem; teaching methods; learning disabilities; attitudes; self evaluation; research reviews (publications); Draw a Person Test; DAP

Body image, reflected in a child's figural drawings, is considered to be those perceptions, attitudes, and values which the individual perceives as describing himself. The Draw a Person and other evaluating tests are mentioned and analyzed upon consideration of how a disability in three areas of perception, thinking, and motor performance impedes a child's ability to formulate an appropriate body image; and related behavior. Fourteen illustrative drawings are presented and discussed for their contribution to knowledge of the self image of brain injured children. Suggestions are made for an educational program to develop a better body image in children with problems. (SN)

ABSTRACT 11156

EC 01 1156 ED N.A.
 Publ. Date 67 22p.

Frostig, Marianne
The Relationship of Diagnosis to Remediation in Learning Problems.
 Southern California University, Los Angeles

Rosenburg Foundation, San Francisco, California
 EDRS not available
 The Association For Children With Learning Disabilities, Inc., 3739 South Delaware Place, Tulsa, Oklahoma 74105 (Whole, \$2.50).
 Paper Published In International Approach To Learning Disabilities Of Children And Youth, Third Annual International Conference (Tulsa, Oklahoma, March 3-5, 1966), Pages 45-66.

Descriptors: exceptional child education; learning disabilities; identification; perception; tests; perceptually handicapped; visual perception; auditory perception; language; cognitive processes; clinical diagnosis; remedial programs; perceptual motor coordination; teaching methods; intelligence; Frostig Developmental Test of Visual Perception; Illinois Test of Psycholinguistic Abilities; (ITPA); Wechsler Intelligence Scale for Children

The diagnosis and remediation of learning problems are considered in the areas of sensory-motor ability, auditory perception, visual perception, language, and thought processes. The use of the following tests for evaluation is discussed: Wepman Test of Auditory Discrimination, Frostig Developmental Test of Visual Perception, Illinois Test of Psycholinguistic Abilities, Wechsler Intelligence

Scale for Children, and several sensory-motor tests. Training programs for remediation of each area are outlined, and emotional and social development is treated. A table compares factors of the structure of the intellect at chronological age 6 with the abilities tapped by the Illinois, Frostig, and Wechsler tests. A bibliography cites 35 entries. Appendixes describe the Frostig and the Illinois tests by providing examples and explaining functions covered by the tests and training procedures which follow. Factors in human movement and physical education programs (with six references cited) as well as basic results on four tests are tabularly arranged. (DF)

ABSTRACT 11243

EC 01 1243 ED 002 786
 Publ. Date Jul 57 90p.
 Francis, Robert J.; Rarick, Lawrence G.
Motor Characteristics of the Mentally Retarded.
 Wisconsin University, Madison
 Office Of Education (DHEW), Washington, D. C.
 EDRS mf, hc
 OEC-484-2259 CRP-152

Descriptors: exceptional child research; mentally handicapped; motor development; educable mentally handicapped; perceptual motor coordination; intelligence differences

Levels and characteristics of motor attainment and/or potential of the mentally retarded (IQ's below 80) were studied. Results indicated that mentally retarded children were markedly inferior in all motor performance tests, and that with advancing age level the deviations from the normal tended to become greater. However, the general pattern of change by age and sex was similar to that reported on normal motor tests. Although the findings seemed to indicate that the poor quality of motor performance was a function of low intelligence, the relationship of measures of intelligence to motor performance test scores was similar to correlations obtained between these variables on normal humans. The great difference in motor proficiency between the normal and the mentally retarded suggested that the degree of motor retardation of the retarded is perhaps greater than had been previously supposed. (GC)

ABSTRACT 11250

EC 01 1250 ED 026 766
 Publ. Date Apr 68 44p.
A Program for the Identification and Remediation of Perceptual Deficiencies in Kindergarten and Primary Grade Students. Interim Progress Report.
 Union Township Board Of Education, New Jersey
 Office Of Education (DHEW), Washington, D. C.
 EDRS mf, hc
 OEG-3-7-703564-4:12

Descriptors: exceptional child research; learning disabilities; perception; identification; teaching methods; perceptually handicapped; perceptual development; motor development; sensory training;

perceptual motor coordination; kindergarten children; special programs; program planning; inservice teacher education; teacher workshops; psychomotor skills; screening tests; Title III

Designed as a perceptual enrichment program for all kindergarten children, the project also emphasizes intensive perceptual training for children manifesting deficiency in this area of development. Screening was done of 869 pre-kindergarten children; those scoring in the lowest 5% on any one or more of the subtests or falling in the lowest 10% of the total scores were given training 4 days a week in groups of six. Children not receiving intensive training were given instruction on the 5th day. Training was in deficit modalities concomitant with reinforcement of the stronger modalities and included warm-up, form perception, and gross motor exercises. A weekly workshop was held for the perception teachers and inservice training provided for all kindergarten and primary teachers. Videotaping was also done. Parent and teacher reaction was favorable. Preliminary planning is outlined, and projected plans for the full 3 years of the study are detailed. An appendix lists the instruments used for screening, and the program of a Title III workshop is included. (JD)

ABSTRACT 11322

EC 01 1322 ED 016 331
 Publ. Date 66 82p.
 Roach, Eugene G.; Kephart, Newell C.
The Purdue Perceptual-Motor Survey, A Direct-Action Approach to Non-Achiever Problems.
 EDRS not available
 Charles E. Merrill Books Inc., 1300 Alum Creek Drive, Columbus, Ohio 43216 (\$4.95).

Descriptors: exceptional child education; tests; perceptual motor coordination; test construction; testing; perception tests; scoring; evaluation; standardized tests; concept formation; test interpretation; group norms

Normative data and instructions are presented for administering and scoring the Purdue Perceptual Motor Survey (PPMS). The findings of several investigators are noted in establishing a rationale for perceptual motor activities in children. Motor activity is discussed in terms of generalized movement, reflex activities, movement patterns, laterality, perceptual motor match, directionality, and concept formation. Implications for practical situations and for evaluation of perceptual motor development are noted. Standardization statistics for the PPMS and item norms for grades 1 through 4 are provided; specific instructions, photographs, and diagrams for the administration and scoring of the PPMS are given. Sample record forms, the visual achievement form cards and 37 sentences are included. (GB)

ABSTRACT 11423

EC 01 1423 ED N.A.
 Publ. Date May 69 7p.
 Ross, Sheila A.

Effects of an Intensive Motor Skills Program on Young Educable Mentally Retarded Children.

Palo Alto Medical Research Foundation, California
 Office Of Education (DHEW), Washington, D. C.
 EDRS not available
 OEG-4-7-070025-1944
 American Journal On Mental Deficiency; V73 N6 P920-6 May 1969

Descriptors: exceptional child research; mentally handicapped; psychomotor skills; educable mentally handicapped; teaching methods; performance tests; recreational activities; physical education; leadership; motor development

In a 6-month training program, skills basic to games and sports played by children in the elementary grades were taught in games contexts to young educable mentally retarded (EMR) children. EMR children were assigned to either the experimental or control groups. Average children provided test data for evaluating the progress of the experimental group following the latter's participation in the program. EMR children were far below average children on the skills measured. With training, the experimental group improved (p less than .001) and this improvement brought the group's scores to a point which did not differ statistically from the average group. With participation in the physical education program for special classes, the control group showed no improvement. (Author)

ABSTRACT 11501

EC 01 1501 ED 029 402
 Publ. Date 65 27p.
Symposium: Perceptual Training for Children with Learning Difficulties (May 5, 1965).
 Middlesex General Hospital Speech And Reading Clinic, New Jersey;
 New Jersey Association For Brain Injured Children, East Orange
 EDRS mf, hc

Descriptors: exceptional child education; learning disabilities; child development; perceptual development; motor development; perceptual motor coordination; visual perception; learning theories; language development; psychomotor skills; eye movements; visualization

A scheme is presented for the development of perception and learning in which a hierarchy of skills begins with innate response systems and progresses through gross motor activities to more specialized motor systems represented by eye-hand coordination. The next stage of development, the control of ocular muscles, is discussed and the development of speech and of associations through the awareness of percept in time and space are described. The necessity for the intactness of each system for adequate learning and the crucial nature of ocular motor patterns in speech development and learning are considered. The scheme is evaluated by Archie Silver and Rosa Hagin. (LE)

ABSTRACT 11543

EC 01 1543 ED 029 445
 Publ. Date 68 146p.

Physical Activities for the Mentally Retarded; Ideas for Instruction.

American Association For Health, Physical Education, And Recreation, Washington, D. C.

EDRS mf

American Association For Health, Physical Education, And Recreation, 1201 Sixteenth Street, N. W., Washington, D. C. 20036 (\$2.00).

Descriptors: exceptional child education; mentally handicapped; physical education; teaching methods; skill development; perceptual motor coordination; body image; unit plan; recreational activities; physical education facilities; games; psychomotor skills; athletic equipment; athletics; physical activities; student evaluation

A viewpoint regarding physical education and recreation for the retarded is presented, and the development of fundamental motor skills, including postural orientation, locomotor, and other skills, is detailed. Teaching techniques are suggested, and activities are outlined on three levels: level 1, basic movement patterns, fundamental motor skills, initial perceptual development, primitive conceptual formation, and development of self awareness, body concept, and self image; level 2, activities of low organization in which patterns, movements and skills developed at level 1 are applied to increasingly complex situations; and level 3, adapted and lead-up activities in which patterns, movements, and skills are used to prepare the individual for participation in sports, games, and higher organized activities. Sample units on bowling and softball (level 4 activities), a classification index of all activities, a 15-item annotated bibliography, and a form for evaluation of and suggestions for the document are also included. (JD)

ABSTRACT 11648

EC 01 1648 ED N.A.
 Publ. Date Aug 69 8p.

Falik, Louis H.

The Effects of Special Perceptual-Motor Training in Kindergarten on Reading Readiness and on Second Grade Reading Performance.

EDRS not available

Journal Of Learning Disabilities; V2 N8 P395-402 Aug 1969

Descriptors: exceptional child research; perceptual motor learning; readiness (mental); kindergarten children; sensory training; student evaluation; testing; perception tests; academic achievement; average students

This study represents an attempt to test the efficacy of providing special perceptual-motor training as part of the general kindergarten curriculum. Children falling within the lower two-thirds of their group on a test of readiness were randomly assigned to an experimental or control group. The groups were compared for readiness for reading at the

end of the year and reading achievement at the end of the second grade. The results showed no significant differences and suggest that the relevance of providing such special training as part of the general curriculum for non-clinical groups must be seriously questioned. (Author)

ABSTRACT 11654

EC 01 1654 ED N.A.
 Publ. Date Nov 67 4p.
 Troth, William B.

Procedures and Generalizations for Remediation in Motor Coordination and Perceptual Training for the Mentally Retarded.

EDRS not available

Training School Bulletin; V64 N3 P77-80 Nov 1967

Descriptors: exceptional child research; mentally handicapped; educable mentally handicapped; psychomotor skills; readiness (mental); perceptual motor coordination

A training program following the visual-motor-perceptual training outlined by Getman and Sutphin's lesson plans was initiated to improve academic readiness of performance. The young educable and teenage trainable retarded groups participating in the program were initially evaluated by standardized psychological tests and informal testing. An inservice training program for the school staff was held to make everyone familiar with the program and goals; the task presentation supplemented the regular training school classroom instruction and consisted of motor coordination drill space orientation, and perceptual training in manipulative activities using form templates. Changes in attention span, motor coordination, and visual perception were observed in the educable group with resulting earlier reading readiness. Significant improvement in body balance, posture, and coordination was shown by the trainables who did not gain in visual perceptual skills. Continuing study was suggested for full assessment of the program's impact on the retardate. (SB)

ABSTRACT 11796

EC 01 1796 ED N.A.
 Publ. Date Sep 69 7p.

Delacato Training for Reading Achievement and Visual-Motor Integration.

EDRS not available

Journal Of Learning Disabilities; V2 N9 P441-7 Sep 1969

Descriptors: exceptional child research; dyslexia; perceptual motor coordination; reading achievement; learning disabilities; age differences; lateral dominance; Delacato Method

To determine the effects of a motor training program on the reading achievement and visual-motor integration of disabled readers with crossed or uncertain lateral expression, 38 subjects (ages 7 to 10) were given Delacato recommended training or a modification

of this training while a control group engaged in physical education. In general, the experimental groups did not make significantly greater gains in reading achievement or visual-motor integration. Young pupils did, however, tend to show greater gains than older pupils. Suggestions are made for future research. (Author/RJ)

ABSTRACT 11968

EC 01 1968 ED 031 001
 Publ. Date 69 265p.

Cratty, Bryant J.

Perceptual-Motor Behavior and Educational Processes.

EDRS not available

Charles C Thomas, Publisher, 301-27 East Lawrence Avenue, Springfield, Illinois 62703 (\$9.50).

Descriptors: exceptional child education; handicapped children; teaching methods; perceptual motor learning; physical education; visually handicapped; orthopedically handicapped; learning theories; social influences; visual perception; minimally brain injured; mentally handicapped; perceptual development; visually handicapped mobility; hyperactivity; psychomotor skills; perceptual motor coordination; lateral dominance

Addressed to elementary school and special class teachers, the text presents research-based information on perceptual-motor behavior and education, including movement and the human personality, research guidelines, and movement activities in general education. Special education is considered and perceptual motor abilities are discussed with reference to the blind, the clumsy child with minimal neurological handicaps, the mentally retarded, and the orthopedically handicapped. An appendix provides a screening test for evaluating perceptual motor attributes of neurologically and mentally handicapped children as well as a mobility orientation test for the blind. (MS)

ABSTRACT 11975

EC 01 1975 ED 031 007
 Publ. Date 69 176p.

Early, George H.

Perceptual Training in the Curriculum. The Slow Learner Series.

EDRS not available

Charles E. Merrill Publishing Company, 1300 Alum Creek Drive, Columbus, Ohio 43216 (\$2.50).

Descriptors: exceptional child education; mentally handicapped; slow learners; perception; curriculum development; educable mentally handicapped; teaching methods; perceptual motor learning; social studies; sciences; industrial arts; reading; perceptual development; motor development; learning theories; perceptual motor coordination; learning activities; map skills; psychomotor skills; motor reactions

A theory of perceptual development is presented and explained in terms of the following concepts: the structured self and the structured world, the motor

basis of internal structure, developing the motor base, and structuring space and time. The movement from theory to remediation is described, and the curriculum is discussed as a source of perceptual training. Four curricula are then detailed: a fifth grade social studies unit for slow learners, involving both a construction and a use phase; a language arts unit on beginning reading using experience charts; a science unit, for intermediate grade educable retardates, on force, energy, and power; and an industrial arts unit on small gasoline engines, involving disassembly, assembly, nomenclature, and functioning. An appendix describes how to construct a styrofoam sphere. (JD)

ABSTRACT 20096

EC 02 0096 ED N.A.
Publ. Date Sep 69 3p.
Webb, Ruth C.

Sensory-Motor Training of the Profoundly Retarded.

EDRS not available
American Journal Of Mental Deficiency; V74 N2 P283-95 Sept 1969

Descriptors: exceptional child research; mentally handicapped; sensory training; institutionalized (persons); custodial mentally handicapped; minimally brain injured; behavior problems; behavior rating scales; perceptual motor learning; AAMP Index

Thirty-two profoundly retarded and institutionalized children with encephalopathy were given sensory-motor training for 5 to 10 months. Training techniques to develop motor reactions to sensory stimulation are outlined. Clinical analysis of changes between pre- and post-treatment behavior tended to be more meaningful than the statistical comparison. This is attributed to the dissimilarity between measuring instruments used. A tentative theory underlying the application of these sensory-motor techniques to the profoundly retarded is presented as a point of departure for future theory formulations. (Author)

ABSTRACT 20115

EC 02 0115 ED N.A.
Publ. Date Dec 65 2p.
Shields, O. L.

Remediation of Learning Disabilities in a Public School System.

EDRS not available
Mental Retardation; V3 N6 P27-8 Dec 1965

Descriptors: exceptional child education; learning disabilities; perceptual motor coordination; perceptually handicapped; teaching methods

A program of remediation of perceptual-motor difficulties and other related learning disorders is described. Symptoms of learning disabilities are related, and suggestions are made for remediation of awkwardness, hyperactivity and hypoactivity, writing difficulties, dyslexia, speech problems, arrhythmia, lateral dominance, figure ground discrimination, spatial relations perception, and recall ability. Program adjustments not-

ed include those in class size and teaching methods. (GB)

ABSTRACT 20156

EC 02 0156 ED 031 822
Publ. Date Aug 66 136p.
Cratty, Bryant J.

Perceptual-Motor Attributes of Mentally Retarded Youth.

Mental Retardation Services Board Of Los Angeles County, California
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; perceptual motor coordination; testing; evaluation methods; trainable mentally handicapped; educable mentally handicapped; mongolism; body image; physical activities; predictive ability (testing); test reliability; sex differences; age differences; racial differences

To evaluate six perceptual-motor attributes of trainable and educable mentally retarded children, a battery of tests was constructed which included body perception, gross agility, balance, locomotor ability, throwing, and tracking; 83 retarded subjects provided reliability data, and their scores, with those of 120 additional subjects, provided normative data. The educable mentally retarded (EMR) and educationally handicapped (EH) groups were significantly superior in all tests to the trainable mentally retarded and Down's Syndrome groups, especially when vision and movement were paired. The Down's Syndrome group evidenced the most marked perceptual-motor deficiencies. EH children had poorer crawling and walking patterns than the EMR's, and these two groups functioned best during late childhood and early adolescence. Children with Down's Syndrome made continual improvement with increased age in tracking ability, gross agility, and in body-part perception. The majority of all subjects had difficulty making left-right identifications relative to their bodies. The correlation between IQ's and total battery scores (based on 37 IQ's) was .63 while the age to total score correlation was .54. (RJ)

ABSTRACT 20224

EC 02 0224 ED N.A.
Publ. Date Aug 67 3p.
Happ, F. William

Teaching Aids for the Mentally Retarded Child.

EDRS not available
Mental Retardation; V5 N4 P33-5 Aug 1967

Descriptors: exceptional child education; mentally handicapped; instructional aids; teaching methods; instructional materials; perception; perceptual motor coordination; auditory perception; discrimination learning; attention; hyperactivity; sensory training

Teaching apparatus and techniques to be used with mentally retarded children are described, including aids with startle elements for the passive child and with combined stimuli for the hyperactive child. Also discussed are aids for teach-

ing perceptual motor skills and sensory perceptual skills (shape, size, and color perception). Aids for teaching auditory and other types of perception are also considered. A book, a catalog, and two films dealing with such devices and techniques are cited. (JD)

ABSTRACT 20337

EC 02 0337 ED N.A.
Publ. Date Sep 69 4p.
Shepherd, Clyde W., Jr.

Childhood Chronic Illness and Visual Motor Perceptual Development.

EDRS not available
Exceptional Children; V36 N1 P39-42 Sept 1969

Descriptors: exceptional child research; special health problems; perceptual development; perceptual motor coordination; visual perception; intelligence; reading achievement

The visual motor perceptual development of 47 second grade children having a history of chronic illness was investigated. Relationships between factors associated with the chronic illness and visual perceptual development are cited and discussed. The results suggest that children having a history of chronic illness perform significantly below expected levels on visual motor tasks and experience early reading difficulty. (Author)

ABSTRACT 20354

EC 02 0354 ED N.A.
Publ. Date 63 8p.
Sechler, Edith W. And Others

A Non-Surgical Approach to the Treatment of Mentally Retarded Children Who Are Brain Injured.

Pennsylvania State Department Of Public Welfare, Harrisburg, Office Of Mental Health

EDRS not available
Pennsylvania Psychiatric Quarterly; V3 N4 P18-25 Fall 1963

Descriptors: exceptional child research; multiply handicapped; learning disabilities; mentally handicapped; physically handicapped; minimally brain injured; neurologically handicapped; special programs; training techniques; physical therapy; perceptually handicapped; pilot projects; Doman Delacato Method

The program studied was based on the Doman method of attempting to treat the injured or inadequate central nervous system through patterning and repetition of the normal developmental process. Of the six subjects chosen initially, only three of whom remained on the program for the full eight months, all had either cerebral palsy or chronic brain syndrome due to known trauma. Ages ranged from 5-1 to 10-5, IQ's from 38 to 44, and social quotients from 10 to 60. Treatments were presented 5 days each week and involved the following procedures: homolateral or cross patterning, masking the subject with a child-sized plastic mask, encouraging the subject to crawl or creep about the room, eye training exercises, training for establishment of lateral dominance, and

applying tactile stimuli to the body. Using a modified version of the Doman-Delacato Developmental Profile, evaluations were made shortly after entrance into the program and then at 3-month intervals. The Profile gave ratings of neurological development in seven brain stage levels at each of which the normal child is presumed to possess abilities in three sensory (visual, auditory, and tactile) and three motor competency areas (mobility, language, and manual competency). Results in terms of raw score increase and rate of neurological growth indicated that the subjects improved in nearly all areas of competency. (JD)

ABSTRACT 20545

EC 02 0545 ED N.A.
Publ. Date Sep 66 50p.
Knights, Robert M.; Thompson, Audrey A.

Training Suggestions for Children with Perceptual Deficits.

Western Ontario University, London, Canada

Canadian Association For Children With Learning Disabilities, Toronto
Ontario Mental Health Foundation, Canada
Children's Psychiatric Research Institute, London, Canada
EDRS not available

Canadian Association For Children With Learning Disabilities, Suite 318, 88 Eglinton Avenue East, Toronto 12, Ontario.

Descriptors: exceptional child education; learning disabilities; teaching methods; perceptually handicapped; training techniques; tactual perception; discrimination learning; memory; kinesthetic perception; auditory perception; visual discrimination; visual perception; problem solving; teacher developed materials; physical development; sensory training; perceptual motor development; body image; space orientation

Training techniques for children with specific learning deficits are suggested in the following areas: olfactory and gustatory, tactual, kinesthetic, spatial relations, auditory, visual, auditory-visual, auditory-kinesthetic, visual kinesthetic (motor), and reasoning. (LE)

ABSTRACT 20754

EC 02 0754 ED N.A.
Publ. Date May 67 12p.
Hollis, John H.

Development of Perceptual Motor Skills in a Profoundly Retarded Child: Part I, Prosthesis.

Parsons State Hospital And Training Center, Kansas, Bureau Of Child Research;

Kansas University, Lawrence

EDRS not available

NICHHD-00870-03

American Journal Of Mental Deficiency; V71 N6 P941-52 May 1967

Descriptors: exceptional child research; mentally handicapped; custodial mentalities; institutionalized (persons); reinforcement; operant conditioning; perceptual motor coordination; task

performance; conditioned response; behavior change; Lindsley Operant Behavior Equation

To develop simple perceptual motor skills in a severely developmentally institutionalized child, operant behavioral techniques were used. The subject was an 11-year-old girl with a Vineland social quotient of 10 who exhibited no verbal behavior or changes in facial expression and for whom candy or other stimulus objects did not serve as reinforcers. Careful diet control was initiated to insure the feasibility of food as a potential reinforcer. Ogden Lindsley's operant behavioral equation was used to diagram the behavioral analysis; the four components are antecedent event (stimulus), movement (response), arrangement (contingency), and subsequent event (consequence). The operant reflex was prosththesized by building the missing components. Stimulus building accomplished by classical conditioning, response building resulting from external manipulation, and response shaping through differential reinforcement as well as contingency and consequence building comprised the operant component development procedure. The prosthetic techniques successfully taught the child to reach, contact, grasp, and hand the stimulus object to the examiner. Three subsequent experiments were successful in developing high level proficiency on Bent-wire and patterned string problems with the subject's right or left hand. Additional data are reported on the effects of contingency and consequence change and of bilateral transfer of training with the same subject. (JM)

ABSTRACT 20755

EC 02 0755 ED N.A.
Publ. Date May 67 11p.
Hollis, John A.

Development of Perceptual Motor Skills in a Profoundly Retarded Child: Part II, Consequence Change and Transfer.

Parsons State Hospital And Training Center, Kansas, Bureau Of Child Research;

Kansas University, Lawrence

EDRS not available

NICHHD-00870-03

American Journal Of Mental Deficiency; V71 N6 P953-63 May 1967

Descriptors: exceptional child research; mentally handicapped; custodial mentalities; institutionalized (persons); reinforcement; perceptual motor coordination; transfer of training; skill development; operant conditioning; task performance; eye hand coordination; behavior change; Lindsley's Operant Behavior Equation

An 11-year-old severely retarded girl was shifted from a continuous reinforcement schedule (CRF) to a fixed ratio-40 schedule with little decrement in performance from the CRF baseline. However, satiation and lack of reinforcement resulted in a drop in the subject's performance to near zero. A second experiment tested for bilateral transfer with

the four hand-eye combinations. Before training the subject had no motor skill with the left hand; results for the Bent-Wire problems showed near zero transfer from the right to left hand while skills developed with the left hand transferred better than 90% to the right hand. These experiments demonstrated that contingency and consequence change did not reduce a retarded child's perceptual motor performance and that bilateral transfer of perceptual motor skills was successful when there was an intact operant reflex in the limb. (JM)

ABSTRACT 20786

EC 02 0786 ED 02 761
Publ. Date Mar 69 21p.
Ansara, Alice

Classroom Screening for Learning Disabilities in the Primary Grades: Utilization of the Slingerland Screening Tests for the Identification of Perceptual-Motor Deficits.

EDRS mf, hc

Descriptors: exceptional child education; auditory discrimination; language handicapped; learning disabilities; maturation; perceptual motor learning; pilot projects; educational diagnosis; primary grades; screening tests; visual discrimination; identification; perceptually handicapped

The effects of maturational lag and innate perceptual-motor language learning disabilities on primary-grade children's school performance are discussed. Early identification of these learning disabilities is emphasized. A pilot study using 280 second and third grade children is described in which the feasibility of whole classroom screening to avoid identification delay was demonstrated. A description of the Slingerland Screening Tests used to identify visual, auditory, and kinesthetic problems and to indicate when there was a need for referral for extensive diagnosis is given. Further research now being conducted to test the feasibility and reliability of the Slingerland tests is cited. A bibliography is included. (RT)

ABSTRACT 20793

EC 02 0793 ED N.A.
Publ. Date Jan 70 10p.

Perceptual-Motor Training and Cognitive Achievement: A Survey of the Literature.

EDRS not available

J Learning Disabilities; V3 N1 P40-9 Jan 1970

Prepared By The Reading Research Foundation, Inc., Chicago, Illinois.

Descriptors: exceptional child research; perceptual motor coordination; research reviews (publications); cognitive development; learning disabilities; perceptual development; motor development; educational programs; educational theories; teaching methods

Research studies concerning various remediation and training approaches with the slow learner are presented. Theoretical background regarding characteristics of behavior, neurological organization

and cognitive processes, stimulus and reflex patterns, and implications for program planning are described. (RD)

ABSTRACT 20833

EC 02 0833 ED 032 700
Publ. Date (69) 13p.
Bowers, Louis

A Program for Neurological Organization.

Southwestern Louisiana University, Lafayette, Health And Physical Education Department
EDRS mf

AAHPER, National Education Association, 1201 Sixteenth Street, N. W., Washington, D. C. 20036.

Descriptors: exceptional child education; motor development; perceptual development; physical activities; perceptual motor learning; psychomotor skills; teaching methods; physical education; equipment; check lists; curriculum guides

A program for neurological organization is explained and its purposes are stated. Hints are given for working with both child and parents; a form for evaluating measures of neuromotor fitness is included. Also provided is a checklist for rating motor exploration, including movements performed lying on the back, on the knees, or standing or on mats, as well as balance, trampoline and creative movement, and perception activities (tactile, visual, kinesthetic, eye hand coordination, and manipulative skills). Special techniques and equipment to be used are listed; a diagram of the gymnasium and a clinician data sheet are supplied. (JD)

ABSTRACT 20860

EC 02 0860 ED 028 556
Publ. Date 13 Dec 68 86p.
Simpson, Dorothy M.

Learning to Learn. The Slow Learner Series.

EDRS not available
Charles E. Merrill Publishing Company, 1300 Alum Creek Drive, Columbus, Ohio 43216 (\$1.50).

Descriptors: exceptional child education; learning disabilities; dyslexia; teaching methods; perception; psychomotor skills; reading; perceptual motor coordination; instructional materials; eye movements; testing; sensory integration; reading readiness; visual discrimination; evaluation techniques; visual perception; lateral dominance

The author gives an account of her early teaching experiences, her awareness that many children did not learn to read, her early investigations of readiness, and her conclusions that difficulty in numbers, copying, or tracing were closely related to reading disability. The importance of visual perception, eye motility, early child development, and physical activities to develop coordination and laterality are discussed. Instructional materials, evaluation methods, criteria for pupil selection and time allocation, teaching methods for group and individual instruction, and adaptation of pursuit training to other classroom activities are

described for a program of visual motility. An experiment in perceptual training conducted with 24 first grade children which indicated that the experimental children made greater gains in reading is reported; also mentioned are the predictive validity of tests and an examination of 20 readiness workbooks. (RJ)

ABSTRACT 20885

EC 02 0885 ED 028 583
Publ. Date 68 144p.

Karnes, Merle B.

Helping Young Children Develop Language Skills: A Book of Activities.

Council For Exceptional Children, Washington, D. C.

EDRS mf

The Council For Exceptional Children, NEA, 1201 Sixteenth Street, N. W., Washington, D. C. 20036 (HC \$2.75).

Descriptors: exceptional child education; psycholinguistics; teaching methods; communication skills; learning activities; disadvantaged youth; language; listening skills; visual perception; language development; verbal ability; associative learning; auditory perception; recall (psychological); perceptual motor learning; memory; instructional materials; mentally handicapped; learning disabilities; preschool children

Developed to improve the language skills of culturally disadvantaged preschool children, the activities can be adapted for use with the retarded or those with learning disabilities. Communication processes considered are derived from the Illinois Test of Psycholinguistic Abilities. Activities are described for the following areas: listening skills or auditory decoding; understanding materials presented visually or visual decoding; verbal expressive abilities or vocal encoding; motor expression or motor encoding; verbal associations or auditory vocal association; visual associations or visual motor association; standard syntactical constructions and auditory closure or auditory vocal automatic process; auditory memory or auditory vocal sequential process; visual memory or visual motor sequential process; and visual closure. An appendix contains a list of sources. (RJ)

ABSTRACT 20906

EC 02 0906 ED 020 601
Publ. Date 67 111p.

Valett, Robert E.

The Remediation of Learning Disabilities, A Handbook of Psychoeducational Resource Programs.

EDRS not available
Fearon Publishers, 2165 Park Boulevard, Palo Alto, California 94306 (\$12.00).

Descriptors: exceptional child education; learning disabilities; teaching methods; curriculum; perceptual motor coordination; language development; perceptual motor learning; concept formation; interpersonal competence; motor development; learning activities; physical activities; curriculum guides; psychomotor skills; remedial programs; perceptual development; cognitive de-

velopment; physical development; skill development; resource guides; sensory training; sensory integration; social development; abstract reasoning

Intended for special education teachers, remedial specialists, and psychologists, the handbook presents a series of concrete activities and exercises for children with learning disabilities. Fifty-three basic learning abilities or resource programs are grouped under six major areas--gross motor development, sensory motor integration, perceptual motor skills, language development, conceptual skills, and social skills. Each ability is defined operationally, illustrated, and provided with an educational rationale. Also, each activity is considered as a developmental task, and beginning, middle, and advanced level program ideas are suggested. A sample program worksheet, references to related programs, suggestions for instructional materials and relevant evaluational and diagnostic aids, and supplementary readings are provided for all 53 programs. Forms for pupil evaluation and pupil progress reports are included. The book, presented in loose leaf format, is intended for modification and extension by its users. (JD)

ABSTRACT 20936

EC 02 0936 ED 027 687
Publ. Date 28 May 68 24p.

Johnson, Doris J.

The Child as an Integrating Organism. Symposium, 1968.

New Jersey Association For Brain Injured Children, East Orange

EDRS mf, hc

New Jersey Association For Brain Injured Children, 61 Lincoln Street, East Orange, New Jersey 07017.

Speech Presented At The New Jersey Association For Brain Injured Children, Symposium 1968 (New Brunswick, New Jersey, May 28, 1968).

Descriptors: exceptional child education; learning disabilities; identification; sensory integration; teacher role; screening; student evaluation; preschool children; attention span; auditory perception; memory; visual perception; psychomotor skills; evaluation techniques; behavior

The lack of integration in children with learning disabilities is discussed, and the need presented for early identification and special education. Recommendations are made for times for screening and areas of learning to be assessed from kindergarten through high school. Observation of behavior in preschool children in the realms of attention, social perception, auditory behavior (both receptive and expressive), visual perception and memory, and motor coordination is suggested as a means for teachers to identify and remediate problems; methods for observing are given. Deficient learning in these areas is mentioned: body image disturbances, time orientation, and prenumber concepts. An appendix contains a form for the evaluation of preschool children. (RP)

ABSTRACT 20986

EC 02 0986 ED N.A.
 Publ. Date 69 137p.

Arena, John I.

Teaching Through Sensory Motor Experiences.

EDRS not available

Academic Therapy Publications, 1539
 Fourth Street, San Rafael, California
 94901.

Descriptors: exceptional child education; learning disabilities; perceptual motor learning; teaching methods; sensory training; body image; space orientation; lateral dominance; kinesthetic perception; retention; eye hand coordination; tactual perception; visualization; visual perception; auditory perception; sequential approach

Included in the collection are articles on sensory-motor sequencing experiences in learning by R.G. Heckelman, integrating form perception by Floria Coon-Teters, building patterns of retention by Harold Helms, hand-eye coordination by Shirley Linn, laterality and directionality by Sheila Benyon, body image and body awareness by Grace Petitclerc, tactile-kinesthetic approaches to learning by Lena Gitter, and relating body awareness and effortless motion to visual training by C.V. Lyons and Emily Lyons. Also discussed are visual perception and discrimination (Donald Hardy and Beverly Casebeer), auditory perception (Martha Serio and Martha Faehle), perceptual distortion (Jack Wahl), arithmetic and language skills developed through emphasis on counting sequences (Florence A. Sharp), and errors in visual perception (Mary Lu Kost). (JM)

ABSTRACT 21027

EC 02 1027 ED N.A.
 Publ. Date Jul 65 6p.

Beck, Gayle And Others

Educational Aspects of Cognitive-Perceptual-Motor Deficits in Emotionally Disturbed Children.

Lafayette Clinic, Detroit, Michigan

EDRS not available

Psychology In The Schools; V2 N3
 P233-8 Jul 1965

Descriptors: exceptional child education; emotionally disturbed; teaching methods; program improvement; remedial instruction; cognitive processes; cognitive development; psychomotor skills; perceptually handicapped; psychoeducational processes; evaluation techniques

The relationships of cognitive-perceptual-motor deficits in children with areas of maladaptation in schools are described, and evaluation and retraining methods are suggested. Areas of function defined and recommended for evaluation include visual perception, auditory perception, memory, orientation, integration, fine motor control, linguistics, gross motor coordination, and tactual perception. Training techniques based on areas of functional deficits are described to be arranged sequentially with increasing complexity, starting at a level

where the child can succeed. Success of this approach is noted to have been demonstrated by observable and measurable gains in academic achievement and behavioral adjustment, and implications for educational programs are emphasized. (SF)

ABSTRACT 21043

EC 02 1043 ED N.A.
 Publ. Date Dec 69 6p.

Crum, Mercedes S.

Development of Motor Skills in Mentally Retarded Children.

Hampton City Public Schools, Virginia
 Virginia State Board Of Education,
 Richmond, Division Of Educational Research

EDRS not available

Hampton City Public Schools, 19 Cary
 Street, Hampton, Virginia 23369.

Descriptors: exceptional child research; mentally handicapped; physical education; psychomotor skills; trainable mentally handicapped; educable mentally handicapped; motor development; teacher attitudes; program effectiveness

To study the effect of an intensive physical education program for mentally retarded children, 44 trainables and 96 educables participated in 30 to 45 minute daily classes involving motor skill activities, low organizational games, and a physical fitness program. Pretests and posttests were administered to assess motor development, fitness, achievement, social adjustment, and peer rating. Tables provide computations of chronological and mental ages, and test results. Results did not indicate significant differences in any comparisons, but the study was noted to have improved both the morale of the teachers and the children's self concept. (RD)

ABSTRACT 21082

EC 02 1082 ED N.A.
 Publ. Date 68 29p.

Readiness Activities for Mentally Retarded Children in Special Classes With Emphasis on Perceptual Training.

Wisconsin State Department Of Public Instruction, Madison, Division For Handicapped Children

EDRS not available

Wisconsin State Department Of Public Instruction, 126 Langdon Street, Madison; Wisconsin 53703.

Descriptors: exceptional child education; mentally handicapped; minimally brain injured; activity learning; instructional materials; teaching methods; activity units; activities; perceptual development; auditory training; visual perception; tactual perception; reading readiness; readiness (mental)

The bulletin describes some training techniques and activities for perceptual development in brain injured children. Described are methods of evaluating perceptual functioning levels, visuo-graphic activities, sandpaper forms and numbers, and stencil form blocks for visuomotor development. Proposed visual perception techniques and materials

are matching games, stick patterning activities, jigsaw blocks, symmetrical blocks, and board patterns. Also included are methods for development of color discrimination, visual memory, auditory discrimination, auditory memory, and kinesthetic perception. Printing activities and the development of number concepts are discussed. Diagrams are used throughout. (JM)

ABSTRACT 21113

EC 02 1113 ED 026 200
 Publ. Date Apr 68 9p.

Zaeske, Arnold

The Diagnosis of Sensory-Motor Disabilities.

EDRS mf,hc

Paper Presented At The International Reading Association Conference, Boston, Massachusetts, April 24-27, 1968.

Descriptors: auditory perception; perceptual motor coordination; diagnostic tests; elementary school students; perceptual motor learning; reading tests; remedial instruction; screening tests; testing programs; test interpretation; visual perception

The importance of motor and perceptual learning in the educational process is discussed. It is hypothesized that an internalization of sensory-motor learnings is important to the perceptual and cognitive development of a child. Developmental and corrective motor training by physical educationalists is suggested. It is concluded that although the test battery by de Hirsch, Jansky, and Langford has a practical use, further development and validation are necessary before it can be used effectively by teachers and clinicians. On the basis of present knowledge, use of the Bender Motor Gestalt Test or the Berry Test of Visual-Motor Integration, the Wepman Auditory Discrimination Test, the de Hirsch Categories Test and the Murphy-Durrell Letter Names Test are suggested as a screening device for first and second-grade children. The Berry Test of Visual-Motor Integration, the Good-enough-Harris Drawing Test, classroom observation of the Strauss Syndrome, the Wepman Auditory Discrimination Test, a spelling test, and the Durrell Visual Memory of Words Test are suggested for other elementary grades. References are listed. (BS)

ABSTRACT 21119

EC 02 1119 ED N.A.
 Publ. Date 69 82p.

Schorlemmer, Ella, Comp.

Band Aid Therapy.

Victoria Public Schools, Victoria, Texas

EDRS not available

Victoria Independent School District,
 1611 East North Street, Victoria, Texas
 77901.

Descriptors: exceptional child education; psychomotor skills; motor development; games; perceptual motor learning; enrichment activities; speaking activities; language rhythm; learning readiness; poetry; speech skills; group activities; recreational activities; singing; music activities; learning activities

A variety of games, songs, hand activities, and other movement experiences are presented which provide for success and enjoyment for most children and which will serve as readiness activities in motor skills for those with inadequate coordination skills. Materials are assembled under the following classifications: body action in rhyme, animal motions, hand fun, counting exercises, therapy through Mother Goose, rhymes for quiet times, the seasons in swing, holidays through motion, verses with action in Spanish, home and family activities, and noises to hear and to make in rhyme. The final section includes sounds in the alphabet with poems or exercises which specifically incorporate the noise for auditory practice. (WW)

ABSTRACT 21294

EC 02 1294 ED 027 960
 Publ. Date Apr 68 16p.
 Blom, Gaston E.
The Concept, Perceptually Handicapped, Its Assets and Limitations.
 Colorado University, Denver, Medical Center
 Grant Foundation, New York, New York
 EDRS mf, hc
 Paper Presented At The Perceptually Handicapped Child Workshop Of The Colorado State Department Of Education And The Colorado Nurse's Association, April 27, 1968.

Descriptors: exceptional child education; cognitive processes; environmental influences; learning disabilities; perceptually handicapped; perceptual motor coordination; perceptual motor learning; response mode; sensory integration; skill development; stimulus behavior; test interpretation; motivation

Perception is defined as a process by which simple and complex information (stimuli) is experienced. Information about how such stimulus inputs are experienced by a child, and resulting responses or outputs in the form of vocalizations and motor acts are presented. The perceptual process, frequently called perceptual-motor, is concerned not only with inputs and outputs, but with what goes on in between. This process is defined as cognition, which is the process of the input being organized and processed within the mind for a response. The term, perceptual handicaps is described as deviations in this process from the expected norms at a given age. Learning disabilities are stated to constitute the whole of which perceptual handicaps are a part. The author points out that perceptual handicaps do not necessarily indicate central nervous system damage because a deprived environment can affect the development of a child's perception, language, and cognition. The effective use of motivation to learn is stressed, and the consideration of performance on tests and general behavior indexes for evaluation of a child's perceptual-cognitive-motor process is included. (WD)

ABSTRACT 21355

EC 02 1355 ED N.A.
 Publ. Date Jul 69 8p.
 Lev, L. Jay
Perceptual-Motor Orientation Technique: A Key to Classroom Teacher Creativity and Individualized Planning.
 EDRS not available
 The Slow Learning Child; V16 N2 P91-8 Jul 1969

Descriptors: exceptional child education; visual perception; perceptual motor coordination; perceptually handicapped; teacher role; teaching methods; overhead projectors

Discussed are the problem of inability to process information sufficiently, the visual mechanism in relation to perceptual motor orientation, attributes of the child functioning below potential, and symptoms of the younger child who has not yet developed perceptual motor processes. Included is a procedure for informal diagnosis, a checklist for diagnosis, preparation steps in perceptual training, and methods of using the overhead projector. (JM)

ABSTRACT 21441

EC 02 1441 ED N.A.
 Publ. Date Jan 70 9p.
 Mann, Lester
Perceptual Training: Misdirections and Redirections.
 EDRS not available
 American Journal Of Orthopsychiatry; V40 N1 P30-8 Jan 1970
 Paper Presented At The Annual Meeting Of The American Orthopsychiatric Association (New York, New York, 1969).

Descriptors: educational theories; perception; perceptual development; visual perception; perceptual motor coordination; perception tests; training techniques

Perceptual motor training has become an educational fad, based upon unwarranted extrapolations from theory and a misreading of the perceptual motor difficulties manifested by handicapped children. What is of value in it can be accomplished through traditional adapted educational and therapeutic approaches directed toward functional and relevant behavioral objectives, rather than toward isolated so called perceptual improvements. (Author)

ABSTRACT 21458

EC 02 1458 ED 034 336
 Publ. Date 69 233p.
 Cratty, Bryant J.
Motor Activity and the Education of Retardates.
 EDRS not available
 Lea And Ferbig, 600 South Washington Square, Philadelphia, Pennsylvania 19106 (\$8.75).

Descriptors: exceptional child education; physical activities; psychomotor skills; teaching methods; mentally handicapped; infants; body image; perceptual motor coordination; early childhood; age differences; handwriting; arousal

patterns; attention control; motor reactions; muscular strength; music activities; self concept; games; evaluation methods; tests

Presented are chapters concerned with the relationship of motor activity to education. The topics discussed are research, movement and performance in infants and children, principles of teaching motor skills; arousal level and attention; scribbling, drawing, writing, strength, flexibility, endurance, and control of large muscles; music and rhythm; and self confidence, body image, and games. Appendixes discuss the administration, scoring, and findings of gross motor, drawing, and game choice tests. (JP)

ABSTRACT 21611

EC 02 1611 ED N.A.
 Publ. Date Jan 70 12p.
 Maloney, Michael P. And Others
Analysis of the Generalizability of Sensory-Motor Training.
 EDRS not available
 American Journal Of Mental Deficiency; V74 N4 P458-69 Jan 1970

Descriptors: exceptional child research; learning disabilities; perceptual motor learning; body image; generalization; attention control; cognitive development; perceptual development

A number of perceptual-motor training systems for the treatment of learning disorders have recently gained widespread lay popularity while well-designed relevant research remains a novelty. This study sought to investigate the generalizability of Kephart's sensory-motor training system. Three basic hypotheses were tested: that sensory-motor training does not generalize to body image development, that the effects of sensory-motor training do not generalize to finger localization, and that attention-control procedures do not affect performance on any of the scales employed. It was concluded that sensory-motor training does generalize to body image development but not to finger localization. The data indicated that significant generalization does occur from attention-control procedures. (Author)

ABSTRACT 21650

EC 02 1650 ED N.A.
 Publ. Date (68) 65p.
Manual of Perceptual-Motor Activities; A Guide for Elementary Physical Education and Classroom Teachers.
 EDRS not available
 Mafex Associates, Inc., P. O. Box 519, Johnstown, Pennsylvania 15907.

Descriptors: exceptional child education; perceptual motor coordination; motor development; perceptual motor learning; physical education; physical development; physical activities; evaluation techniques; games; equipment utilization; program descriptions; teaching guides

The manual is designed to provide classroom teachers and physical educators with information on new techniques in

perceptual motor training. The need for physical education, the purpose of the manual, the philosophical background, a glossary of definitions, and a hypothetical case are presented as introductory matter. Diagnostic tools are discussed and listed, programing techniques are illustrated, and possible activities outlined. Methods of relating physical activities to classroom activities are reviewed, and games are described. Obstacle courses are suggested for equipment utilization. Each section includes diagrams and step-by-step instructions for practical application. (JM)

ABSTRACT 21750

EC 02 1750 ED 035 129
Publ. Date 68 104p.
McLeod, Pierce H.

The Undeveloped Learner; A Developmental-Corrective Reading Program for Classroom Teachers.

EDRS not available
Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 (\$5.75).

Descriptors: exceptional child education; learning disabilities; interpretation; educational needs; inservice teacher education; identification; teaching methods; student evaluation; test records (forms); auditory training; perceptual motor learning; perceptual motor coordination; remedial reading; educational diagnosis

A program for undeveloped learners is described and includes instructional models and testing methods for discovering these children. The instructional needs of the undeveloped learner and some methods of meeting those needs are discussed; those mentioned are auditory and visual-motor learning, auditory skill development activity, motor, ocular-motor, and visual motor patterning, developing word recognition skills, and developing visual skill activities. The instructional methods, materials, and organization, program evaluation, and teacher inservice education are considered. The teacher's handbook concerning plastic overlays, motor patterning, posture, eye movement, listening post, handwriting, reversals, visual teaching, vocabulary development, rote phonics, models for tracing (V.A.K.T.), word study, word learning, Tachist-O-Flasher, word file, structural analysis, directed reading, and oral reading is provided. (JM)

ABSTRACT 21815

EC 02 1815 ED N.A.
Publ. Date Apr 70 8p.
Sabatino, David A.; Hayden, David L.
Prescriptive Teaching in a Summer Learning Disabilities Program.
EDRS not available
Journal Of Learning Disabilities; V3 N4 P220-7 Apr 1970

Descriptors: exceptional child research; learning disabilities; summer programs; diagnostic teaching; program descriptions; reading comprehension; teaching methods; perceptual motor learning

Since the prevention and treatment of chronic failure has been a serious problem since the beginning of the American educational system, the intent of the study was to examine the academic achievement and changes in behavior related to a specified kind of curriculum during a six-week summer program. A unisensory perceptual training curriculum was selected in order to utilize the child's strongest perceptual area at the beginning of training, while weaker perceptual areas were avoided initially. Emphasis was on utilizing language cues as a compensatory behavior to strengthen perceptual deficits. The program was designed to alter the learning sets and to modify the behaviors of children with learning disability manifested in chronic failure. (Author)

ABSTRACT 21962

EC 02 1962 ED 036 941
Publ. Date (69) 22p.
An Adaptive Playground for Physically Disabled Children with Perceptual Deficits; The Magruder Environmental Therapy Complex.
Orange County Board Of Public Instruction, Orlando, Florida
Office Of Education (DHEW), Washington, D. C., Bureau Of Elementary And Secondary Education
EDRS mf,hc

Descriptors: exceptional child education; physically handicapped; perceptual motor coordination; playgrounds; recreational facilities; preschool children; design needs; motor development; environmental criteria; physical facilities

Designed as a specialized play area for physically handicapped preschool children with perceptual deficits, the Magruder Environmental Therapy Complex (ETC) is described as a means to create an environment in which these children could function freely. Pictures are used to show children using the equipment and the architectural aspects of construction. A brief summary, the problem defined, the goal of ETC, the basic perceptual motor experiences of ETC, principle features of ETC and physical problems, testing plans designed to evaluate the effects of ETC, and early observations by teachers, therapists and aides indicating the benefits of the free, unstructured play area are detailed. (WW)

ABSTRACT 22044

EC 02 2044 ED 023 552
23p.
Sensory-Motor Perception. Preliminary Findings of a Cooperative Curriculum Project.
Office Of Education (DHEW), Washington, D. C., Bureau Of Elementary And Secondary Education
EDRS mf,hc

Descriptors: exceptional child education; learning difficulty; auditory perception; curriculum development; instructional materials; lateral dominance; motor development; perceptual development; perceptual motor learning; sensory training; tactual perception; visual

discrimination; Elementary and Secondary Education Act Title III

Many children with learning problems have difficulties with perceptual development. The bulletin, reporting the preliminary findings of a Cooperative Curriculum Project funded under Title III, Elementary and Secondary Education Act, discusses Kephart's definition of sensory motor perception. It defines and suggests activities and materials available for gross and fine motor development; body image, including posture, laterality, and dominance; visual motor perception, including visual motor coordination, figure ground, perceptual constancy, spatial skills, visual discrimination, and visual memory, auditory perception, including auditory discrimination and memory; and tactile discrimination. A bibliography and a film listing are also included. (JB)

ABSTRACT 22183

EC 02 2183 ED 037 835
Publ. Date 69 182p.
Perceptual-Motor Foundations: A Multidisciplinary Concern. Proceedings of the Perceptual-Motor Symposium (Washington, D.C., May 8-10, 1968).

American Association For Health, Physical Education, And Recreation, Washington, D. C.

EDRS mf
American Association For Health, Physical Education, And Recreation, 1201 Sixteenth Street, N. W., Washington, D. C. 20036 (\$3.00).

Descriptors: exceptional child education; perceptual motor learning; motor development; perceptual development; child development; learning; perception; physical education; preschool children; research needs; perceptual motor coordination; interdisciplinary approach; learning disabilities; environmental influences; individualized programs

The proceedings include addresses by Logan Wright on highlights of human development from birth to age 11, Leonard A. Cohen on development and function of the mechanisms of perception, Eric Denhoff on motor development as a function of perception, and Alan Hein on exposure history in spatial-motor development. Also provided are reports by William T. Braley on the Dayton program for developing sensory and motor skills in 3, 4, and 5 year-old children, by Alice D. Coffman on personalizing early education, and by Louis Bowers on a program of motor development activities. A multidisciplinary exchange on perceptual motor development, group discussions on learning and on future needs, and a conference summary are included. Appendixes list conference leaders, organizational representation, participants and observers, and questions raised by participants. (LE)

ABSTRACT 22185

EC 02 2185 ED 037 837
Publ. Date 24 Aug 69 69p.
Rosner, Jerome And Others

The Identification of Children with Perceptual-Motor Dysfunction; a Study of Perceptual-Motor Dysfunction among Emotionally Disturbed, Educable Mentally Retarded and Normal Children in the Pittsburgh Public Schools.

Pittsburgh University, Pennsylvania, Learning Research And Development Center; Pittsburgh Public Schools, Pennsylvania, Division Of Mental Health Services Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; screening tests; perceptual motor learning; test construction; test validity; behavior rating scales; educable mentally handicapped; emotionally disturbed; socially maladjusted; auditory perception; body image; perceptual development; sensory integration; motor development; visual perception; Rosner Perceptual Survey; Rosner Richman Perceptual Survey

The Rosner Perceptual Survey (RPS) and the Rosner-Richman Perceptual Survey (RRPS) were developed for screening perceptual motor dysfunction. 17 subtests of visual motor and auditory motor functions, general motor skills, self awareness, and integrative function; the RRPS, intended for teacher or paraprofessional use, included the same items except optometric ones and ones requiring special equipment. Validation was conducted with 50 regular, 50 educable mentally handicapped, and 50 emotionally disturbed and socially maladjusted elementary school students; cross validation was accomplished with more children from each group. External validity was determined by behavior rating scale based on correlates of learning disabilities. Variance between scores made by the regular and the other students was significant (p less than .005). Further findings were as follow: RPS items intercorrelated (for 28 of its 30 items p less than .005); the RPS and RRPS correlated for all three groups (p less than .005); the RPS and the behavior rating scale correlated (p less than .001). Appendixes provide the behavior rating scale and manuals and supplementary data analysis for the RPS and RRPS. (JD)

ABSTRACT 22207

EC 02 2207 ED 037 859
Publ. Date 68 43p.
Suggested Activities to Use With Children Who Present Symptoms of Visual Perception Problems, Elementary Level.
Washington County Board Of Education, Washington, Pennsylvania
EDRS mf,hc

Descriptors: exceptional child education; learning disabilities; perceptual motor learning; visual perception; learning activities; perceptually handicapped; body image; visual discrimination; sensory training; instructional materials; teaching methods; teacher developed materials; puzzles; educational games;

screening tests; manipulative materials; identification; individual characteristics

Symptoms displayed by primarily aged children with learning disabilities are listed; perceptual handicaps are explained. Activities are suggested for developing visual perception and perception involving motor activities. Also suggested are activities to develop body concept, visual discrimination and attentiveness, visual memory and figure ground perception. Body concept puzzles are recommended for developing visual motor integration; cutting, pasting, and sorting activities are described; and specific visual motor activities, including walking beam, are detailed. Also provided are screening test examples and bibliographies of teaching materials and of texts and periodicals. (JD)

ABSTRACT 22222

EC 02 2222 ED 037 874
Publ. Date Oct 69 302p.
Bush, Wilma Jo; Giles, Marian Taylor
Aids to Psycholinguistic Teaching.
EDRS not available
Charles E. Merrill Publishing Company, 1300 Alum Creek Drive, Columbus, Ohio 43209 (\$7.95).

Descriptors: exceptional child education; learning disabilities; language development; psycholinguistics; teaching methods; learning activities; slow learners; visual learning; aural learning; perceptual motor learning; remedial instruction; developmental tasks; grammar; expressive language

Designed for the teacher in training as well as the classroom teacher, the text presents step-by-step remedial techniques for developmental training of the slow learner or the child with learning disabilities. Presented are activities, instructional materials, and teaching techniques for grades 1 through 8. Developmental areas included are auditory and visual reception, auditory and visual association, verbal and manual expression, grammatic closure, auditory and visual sequential memory, perceptual motor activities, remedial recreation, and visual, auditory, tactile, and kinesthetic techniques. (JM)

ABSTRACT 22296

EC 02 2296 ED N.A.
Publ. Date 69 232p.
Orem, R. C.
Montessori and the Special Child.
EDRS not available
Capricorn Books, 200 Madison Avenue, New York, New York 10016 (\$2.25).

Descriptors: exceptional child education; handicapped children; educational methods; perceptual motor learning; educational research; remedial instruction; Montessori Method

Introduced by a discussion of the history and general techniques of the Montessori method with the exceptional child, the text is a collection of articles by a number of authors from a variety of viewpoints. Papers consider the relationship of Fuller and Piaget to Montessori, the sensorimotor approach of Montessori

to special education, Montessori applications and techniques in special education, and the future of the Montessori Method in the light of research. Appendixes contain selected Montessori lectures and information concerning contributors. (JM)

ABSTRACT 22345

EC 02 2345 ED N.A.
Publ. Date Mar 70 7p.
DeHaven, George E.; Mordock, John B.
Coordination Exercises for Children with Minimal Cerebral Dysfunction.
EDRS not available
Physical Therapy; V50 N3 P337-43 Mar 1970

Descriptors: exceptional child research; minimally brain injured; psychomotor skills; exercise (physiology); perceptual motor coordination

Forty children (ages 8 to 12) diagnosed as having minimal cerebral dysfunction received exercises designed to improve body image. Half did the exercises for 30 minutes daily, 5 days per week for 6 months. The remaining 20 did the same exercises for 15 minutes; for another 15 minutes they did exercises designed specifically to improve fine motor skills and static and dynamic balance. Significantly more gains were made by the children in the latter group on tasks requiring fine control of distal muscles; no significant change was noted on tasks requiring control of larger muscles. The article is followed by comments by Sarah Semans. (RJ)

ABSTRACT 22392

EC 02 2392 ED N.A.
Publ. Date 68 18p.
Crawford, Lee
Perceptual-Motor Development and Learning.
EDRS not available
Edgemoor Publishing Company, 6110 B Edgemoor, Houston, Texas 77036.

Descriptors: exceptional child education; perceptual motor learning; learning disabilities; teaching methods; visual learning

The problem of inadequate perceptual motor development is discussed. Specific characteristics and disorders of children with learning disabilities are listed as well as symptoms of visual problems. Six general areas of movement related to vision (general movement pattern, specific movement patterns, eye movement patterns, vision-language arts, visualization ability, and visual perception organization) are described and specific teaching techniques for each area are given. (MS)

ABSTRACT 22462

EC 02 2462 ED N.A.
Publ. Date 70 6p.
Early, George H.; Sharpe, Theodore M.
Perceptual-Motor Training and Basic Abilities.
EDRS not available
Academic Therapy Quarterly; V5 N3 P235-40A Spr 1970

Descriptors: exceptional child education; learning difficulties; perceptual

motor learning; basic skills; home programs; educational diagnosis

The procedures of the Purdue Achievement Center for Children are described and a typical case history presented. The steps involved are discovering the basic learning problems, building a better internal organization, and helping the child to project this stronger organization on to academic tasks. Discussed are the Wechsler Intelligence Scale for Children, and the Illinois Test of Psycholinguistic Abilities, the individualized program developed from the test results, and the further adjustment of the program upon retesting. Of major concern is the need to help the transfer of new skills to academic skills and the dissolution of weak attitudes and study habits. (JM)

ABSTRACT 22477

EC 02 2477 ED N.A.
Publ. Date Nov 69 217p.
Cratty, Bryant J.; Hutton, Robert S.
Experiments in Movement Behavior and Motor Learning.
EDRS not available
Lea And Febiger, 600 South Washington Square, Philadelphia, Pennsylvania 19106 (\$4.95).

Descriptors: exceptional child education; skill development; psychomotor skills; motor reactions; scientific methodology; problem solving; reaction time; perceptual motor coordination; performance factors; aspiration; kinesthetic perception; transfer of training; retention; laboratory manuals; laboratory experiments

Designed to enable physical educators to explore psychological variables influencing motor performance, movement behavior, and motor learning, this laboratory manual contains 25 experiments providing experience in utilizing and analyzing scientific methods of problem solving. Experiments include past findings, procedures for administering tests, application of findings, and sample data and computation sheets. Experiments described are reaction time--movement speed; personal equations in movement; balance--agility; strength and endurance; arm-leg coordination; complex movement speed; hand-eye coordination; stress and performance; tension and performance; amount-set; aspiration level; kinesthesia; kinesthetic after-effects; performance and learning curves; analysis of a learning curve; whole versus part practice; spaced versus distributed practice; bi-lateral transfer; inter-task transfer; knowledge of results; influence of visual, manual, and visual-manual guidance upon skill acquisition; influence of interpolated activities upon learning and performance; comparison of mental practice and physical practice; serial effects in learning and retention; and short-term retention. Included are a 99-item bibliography and statistical reference tables. The manual is designed for use with the text of Dr. Cratty, *Movement, Behavior and Motor Learning*, but may be used to supplement other texts. (MS)

ABSTRACT 22532

EC 02 2532 ED 038 802
Publ. Date 69 187p.
Learning Difficulties. Working Copy, 1969.
Jefferson County Board Of Education, Louisville, Kentucky
EDRS mf, hc

Descriptors: exceptional child education; learning disabilities; perception; perceptual motor learning; curriculum guides; visual perception; auditory perception; psychomotor skills; instructional materials; learning activities; teaching methods; tests; educational games; sensory training; auditory training; body image

The conditions of learning and the causes of learning difficulties are defined; identification of children with learning disabilities is considered. Half of the document is a curriculum guide for remediation through the visual, auditory, and motor approach; problems, symptoms, diagnoses, representative activities, and materials are detailed. About one-third of the document consists of appended tests and suggestions for teaching methods and materials. A glossary and bibliography of professional and instructional materials are also included. (JD)

ABSTRACT 22581

EC 02 2581 ED 038 826
Publ. Date 69 228p.
Buist, Charlotte A.; Schulman, Jerome L.

Toys and Games for Educationally Handicapped Children.

EDRS not available
Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 (\$9.50).

Descriptors: exceptional child education; mentally handicapped; learning disabilities; instructional materials; bibliographies; toys; educational games; manipulative materials; visual perception; auditory perception; sensory training; memory; concept formation; motor development; psychomotor skills; verbal development; annotated bibliographies; intellectual development; language development; perceptual motor learning

Commercially available toys and games for children with educational handicaps, from general retardation to disabilities in limited areas of functioning are listed. For each toy, the name, manufacturer, and sex and age interest are stated; a description of the toy is given. All toys are classified according to the intellectual functions involved. These include visual perception (like-different, part-whole, spatial relations, figure-ground) and auditory perception (like-different, figure-ground). Additional categories are retention and recall (visual memory, auditory memory), conceptualization, and expression (fine motor, gross motor, verbal). (JD)

ABSTRACT 22593

EC 02 2593 ED N.A.
Publ. Date 68 7p.
Obrecht, Donna

The Wheeling Motor Facilitation Program.

EDRS not available
Journal Of The Association For The Study Of Perception; V3 N2 P11-7 Fall 1968

Paper Presented At The Fall Conference Of The Association For The Study Of Perception (Illinois Beach State Park, October 25-26, 1968).

Descriptors: exceptional child education; learning disabilities; kindergarten children; motor development; perceptual motor learning; psychomotor skills; visual perception; skill development; program descriptions; developmental programs; Frostig Developmental Program

A program to help kindergarten children develop perceptual-motor abilities by participating in motor activities and using the Frostig visual perception materials is described. Activities, related programs, and some results of evaluation are included. (MS)

ABSTRACT 22597

EC 02 2597 ED N.A.
Publ. Date 68 5p.

Applegate, Don J.
Physically Fit to Learn.

EDRS not available
Journal Of The Association For The Study Of Perception; V3 N2 P28-32 Fall 1968

Descriptors: physical education; physical fitness; perceptual development; skill development; perceptual motor coordination

The importance of physical fitness and the physical education program in children's learning is discussed. Essentials of the physical education program are listed. The necessity of perceptual training is noted, and physical education activities to develop perceptual skills are listed. (MS)

ABSTRACT 22645

EC 02 2645 ED N.A.
Publ. Date 69 3p.

Johnson, Robert
Innovative and Inexpensive Devices for Perceptive Motor Training.

EDRS not available
Journal Of The Association For The Study Of Perception; V4 N2 P46-8 Fall 1969

Paper Presented At The Fall Conference Of ASP (Rockford, October 31-November 1, 1969).

Descriptors: exceptional child education; recreation; physical education; athletic equipment; psychomotor skills; perceptual motor coordination

Descriptions are presented of inexpensive equipment for use with perceptually or mentally handicapped students to develop balance. Materials covered are as follow: ramps; a swinging bridge, oscillating blocks, balance beam, rows of tires, low friction platforms, over and under bars, a moveable platform, a response time machine, and a spindle stacking device. An address is provided to contact for further information on constructing the equipment. (RJ)

ABSTRACT 22647

EC 02 2647 ED N.A.
 Publ. Date Jun 69 223p.
 Cratty, Bryant J.; Martin, Sister Margaret Mary

Perceptual-Motor Efficiency in Children.

EDRS not available
 Lea And Febiger, 600 South Washington Square, Philadelphia, Pennsylvania 19106 (\$8.75).

Descriptors: exceptional child education; handicapped children; perceptual motor coordination; psychomotor skills; motion; learning processes; motor development; elementary school students; early childhood; group norms

The relationship between motor and mental functioning in normal and exceptional children is explored in a book directed primarily toward parents and educators. Current literature linking body movement with perceptual and intellectual skills is reviewed. Delineated is a program for development of perceptual-motor efficiency, based on principles of child development, which would employ motor activities as a type of teaching tool in elementary programs. Principles, rationale, and practices helpful to the teacher, administrator, or parent are included, as well as norms to help identify the exceptional child. Specific topics covered include: adjustment of arousal level and improvement of attention; scribbling, drawing and writing; strength, flexibility, and endurance; large muscle control; music and rhythm; self-confidence, the body-image, and games. Each chapter contains a summary and references. Appendixes contain tests, norms, scoring, and research results. (KW)

ABSTRACT 22681

EC 02 2681 ED N.A.
 Publ. Date Apr 70 18p.
 (Perceptual Motor Skills Development.)

EDRS not available
 Journal Of Health, Physical Education, And Recreation; V41 N4 P30-47 Apr 1970

Descriptors: exceptional child education; perceptual motor learning; physical education; developmental programs; preschool education; psychomotor skills; motor development; reading readiness; remedial programs

Five articles focus on perceptual motor skills. Hope M. Smith draws implications for movement education experiences from perceptual motor research in the areas of vision, audition, tactile perception, balance mechanisms (inner ear), and proprioception. A long-term developmental movement education program for two to five year olds is described by Marguerite Clifton. Jacqueline Herkowitz discusses a perceptual-motor training program designed to improve gross motor abilities of preschoolers. Paul Smith reports a study of perceptual motor skills and reading readiness of kindergarten children. Behavioral integration of problem

children through remedial physical education is discussed by Ernst J. Kiphard. (MS)

ABSTRACT 22733

EC 02 2733 ED 039 675
 Publ. Date 69 41p.

Brinning, Dorothy And Others Activities for a Perceptual Motor Program.

A. Harry Moore Laboratory School, Jersey City, New Jersey
 Office Of Education (DHEW), Washington, D. C., Bureau Of Elementary And Secondary Education
 EDRS mf,hc

Descriptors: exceptional child education; physically handicapped; perceptual motor coordination; learning activities; perception; curriculum guides; motor development; psychomotor skills

Perceptual motor activities for physically handicapped children are presented in the areas of fine and gross motor skills. Also detailed are activities to develop body image, visual motor skills, and tactile and auditory perception. (JD)

ABSTRACT 22734

EC 02 2734 ED 039 676
 Publ. Date 69 47p.

Brinning, Dorothy And Others Perceptual Motor Activities in the Home.

A. Harry Moore Laboratory School, Jersey City, New Jersey
 Office Of Education (DHEW), Washington, D. C., Bureau Of Elementary And Secondary Education
 EDRS mf,hc

Descriptors: exceptional child education; perceptual motor coordination; perceptually handicapped; learning activities; parent participation; learning disabilities; teaching methods; curriculum guides; psychomotor skills; perception; motor development

Designed for parents, the guide offers instructions for home activities to supplement the school program for children with perceptual motor disturbances. An individual program sheet is provided; behavioral characteristics and the child's need for structure are explained. Activities detailed include motor planning, body image, fine motor development, and visual, tactile, and auditory perception. Lists present community resources, suggested reading, and sources of toys and games. Finger plays and other activities are appended. (JD)

ABSTRACT 22833

EC 02 2833 ED N.A.
 Publ. Date 60 292p.

Kephart, Newell C. The Slow Learner in the Classroom.

EDRS not available
 Charles E. Merrill Books, Inc., 1300 Alum Creek Drive, Columbus, Ohio 43209.

Descriptors: exceptional child education; slow learners; achievement; learning readiness; preschool children; perceptual development; learning activities; readiness skills; motor development;

teaching methods; instructional materials; child development; rating scales

Designed for classroom teachers, the text discusses the development and achievement of preschool children, skills and abilities in simple tasks, motor bases of achievement, the perceptual process, development of form perception, and space discrimination. A perceptual rating scale to identify children with inadequate readiness skills, and training activities useful in the classroom to develop the readiness skills such as chalkboard training, sensory motor training, ocular control, and form perception are described. (LE)

ABSTRACT 22864

EC 02 2864 ED 040 516
 Publ. Date Sep 69 111p.

Fisher, Kirk L.**Effects of a Structured Program of Perceptual-Motor Training on the Development and School Achievement of Educable Mentally Retarded Children. Final Report.**

Pennsylvania State University, University Park
 Office Of Education (DHEW), Washington, D. C., Bureau Of Research
 EDRS mf,hc

OEG-0-8-082104-4702(032)
 BR-8-B-104

Descriptors: exceptional child research; mentally handicapped; perceptual motor coordination; training; educable mentally handicapped; academic achievement; intelligence level; age differences

Of 102 educable mentally handicapped children in special classes, 54 were identified by the Purdue Perceptual Motor Survey (PMS) as deficient in perceptual motor abilities. These 54 children were assigned to one of the following groups: training, which participated in an individualized, structured perceptual motor program twice a week for 4 1/2 months; Hawthorne, which met with the trainer but played table games; and control. Achievement and intelligence tests were given. The hypothesized improvement in perceptual motor abilities did not manifest itself, although children under 10 years of age in the training group scored significantly higher on the PMS than did controls of like age. Nor did hypothesized improvement in intellectual performance, or achievement result. However, all three groups improved significantly on PMS and achievement test scores; and training and Hawthorne groups showed significantly improved IQ scores. Thus, evidence suggested a correlation between perceptual motor ability and the variables of intelligence and achievement. (Author/JD)

ABSTRACT 22865

EC 02 2865 ED 040 517
 Publ. Date 69 149p.

Phillips, John L., Jr. The Origins of Intellect: Piaget's Theory.

EDRS not available
 W. H. Freeman And Company, 660 Market Street, San Francisco, California 94104 (\$2.75).

Descriptors: exceptional child education; child development; intellectual development; child psychology; perceptual motor learning; psychomotor skills; cognitive processes; teaching techniques; educational theories; learning processes; Piaget Theory

Discussed are Piaget's methods, his relation to other theories, and an overview of his theory. Described are the six stages of his sensorimotor period with a summary of imitation and play, and the concrete operations period with the subperiods of changes from sensorimotor in preoperation, differences from the adult in preoperation, and the properties of groups and problems in the concrete operations subperiod. Also presented are aspects of the formal operations period including operations applied to the floating bodies problem, operations on operations, the real versus the possible, egocentrism, and formal as pertaining to form. Teaching principles and examples, testing, and limitations of the method are analyzed as are the educational implications of the theory. (JM)

ABSTRACT 22919

EC 02 2919 ED N.A.
Publ. Date 64 29p.

Ayres, A. Jean

Perceptual-Motor Dysfunction in Children.

EDRS not available

Greater Cincinnati District, Ohio Occupational Therapy Association, 1539 Shenandoah Avenue, Cincinnati, Ohio 45237 (\$2.00).

Descriptors: perceptually handicapped; perceptual motor coordination; neurological organization; psychomotor skills; physiology; perception; stimuli; motor development

The monograph explores the neurophysiological mechanisms involved in perceptual-motor dysfunction. Perceptual-motor dysfunction is defined and a theoretical approach is presented. The basic postulates of this theory are that perceptual-motor functions develop through specific steps of sequential maturation, that there are identifiable areas of perceptual-motor dysfunction and specific central nervous system mechanisms critical to the integrative process which enables perception, and that both sequential maturation and the function of the central nervous system integrative mechanisms are dependent on patterned stimulation and meaningful responses or use of the stimuli. Five syndromes (apraxia, perception of form and position in space, integration of two sides of the body, visual figure-ground discrimination, and tactile defensiveness) revealed to be the functional units are clarified, stressing interpretation of neurophysiological mechanisms and the onto genetic process related to each. Gross motor activities to be used in the

treatment of perceptual-motor dysfunction are discussed. (LE)

ABSTRACT 22934

EC 02 2934 ED N.A.
Publ. Date 64 93p.

Kephart, Newell C.

Aids to Motoric and Perceptual Training.

EDRS not available

State Department Of Public Instruction, Bureau For Handicapped Children, 126 Langdon Street, Madison, Wisconsin 53703.

Descriptors: exceptional child education; learning disabilities; perceptual motor coordination; perception; child development; perceptually handicapped; psychoeducational processes; learning processes; clinical diagnosis; psychomotor skills; curriculum guides; parent child relationship; activities

The compilation, which is a record of a conference on the strengthening of home and community programs for children with learning disabilities, includes discussions of motoric development, cultural influences on the school curriculum, the non-intact child and the standard curriculum, and meeting problems which face parents of children with behavioral and learning disorders. Terms used in perceptual-motor training are defined, and a series of perceptual-motor performances to be observed and rated with diagnostic intent are presented. Specific training activities are presented for the development of movement patterns, dynamic balance and flexibility, rhythms, eye-hand coordination, ocular training, and dimension and form. (LE)

ABSTRACT 22971

EC 02 2971 ED N.A.
Publ. Date Jun 70 6p.

Witengier, Mary

An Adaptive Playground for Physically Handicapped Children.

EDRS not available

Physical Therapy; V50 N6 P821-6 Jun 1970

Descriptors: exceptional child education; physically handicapped; playgrounds; perceptual motor coordination; preschool children; perceptual development; motor development; Magruder Environmental Therapy Complex

The Magruder Environmental Therapy Complex was designed to provide 15 closely interwoven experiences in perception and a continuum of perceptual motor experiences for physically handicapped preschool children. The child's motivation for play is capitalized upon. The report describes the development of the play complex, as yet not completed, and states that preliminary evaluation indicates increased motor achievement and greater endurance in some children. A more scientific evaluation is planned.

Photographs of play equipment accompany the article. (KW)

ABSTRACT 23309

EC 02 3309 ED N.A.
Publ. Date 66 241p.

Frankel, Max G. And Others

Functional Teaching of the Mentally Retarded.

EDRS not available

Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62763 (\$9.75).

Descriptors: exceptional child education; educable mentally handicapped; trainable mentally handicapped; psychomotor skills; perceptual motor coordination; teaching techniques; manipulative materials; educational games; mentally handicapped; functional teaching

The text is intended as a practical aid to teachers and other professionals working with educable and trainable mentally handicapped children, and as a textbook for use in teacher training institutions. The first part of the book discusses the principles and practices of functional teaching: its nature, objectives, methods and means of implementation, the relation of historical and contemporary theories to functional teaching, teaching motor activities, perceptual training, motor-perceptual integration, and several case histories. The second and major portion presents over 100 teaching aids and devices utilized for basic physical-perceptual development, the advancement of those skills, and their integration. Many illustrations and instructions for construction of many of the devices accompany the descriptions of the games, objects, materials, exercises, and other techniques for improving physical and perceptual skills. (KW)

ABSTRACT 23559

EC 02 3559 ED 042 292
Publ. Date (69) 17p.

Rosner, Jerome

Application of the IPI Model to a Perceptual Development Curriculum.

Pittsburgh University, Pennsylvania, Learning Research And Development Center

EDRS mf, hc

Descriptors: exceptional child education; learning disabilities; curriculum; perceptual motor coordination; perceptual development; psychomotor skills; individualized instruction

The Individually Prescribed Instruction (IPI) Model developed by Bolvin and Glaser (1968) is applied to a perceptual development curriculum for children manifesting learning disabilities. The Model utilizes criterion referenced tests for behavioral objectives in four areas: general motor, visual motor, auditory motor, and integrative. Eight units for general motor skills are appended in chart form. (JD)

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